# United States Court of Appeals for the Second Circuit



**APPENDIX** 

# 76-7608

# United States Court of Appeals

FOR THE SECOND CIRCUIT
NO. 76-7608

15 B P/S

In the Matter of

The Complaint of Tug Helen B. Moran, Inc., as owner, and Moran Towing & Transportation Co., Inc., as chartered owner, of the Tug Diana L. Moran for exoneration from or limitation of liability,

Plaintiffs,

MORAN TOWING & TRANSPORTATION Co., INC.,

Plaintiff-Appellant,

STATE OF CONNECTICUT.

Claimant-Appellee.

ON APPEAL FROM THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK

JOINT APPENDIX

2 8 1977

Attorneys for Moran Towing & Transportation Co., Inc. One Battery Park Plaza New York, New York 10004

BIGHAM ENGLAR JONES & HOUSTON
Attorneys for State of Connecticut
99 John Street
New York, New York 10038

PAGINATION AS IN ORIGINAL COPY

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# Relevant Docket Entries— Moran's Complaint

### UNITED STATES DISTRICT COURT

72 Civ. 4633

### In the Matter

of

The Complaint of "Tug Helen B. Moran Inc." as owner

### and

Moran Towing & Transportation Co. Inc. as chartered owner of Tug "Diana L. Moran"

# Limitation of Liability

DATE	PROCEEDINGS
\$2000 TO 1000 T	

- Nov. 1—72 Filed complaint and Stip. for Costs (\$250. Moran Towing & Transportation Co. Inc.)
- Nov. 1-72 Filed Affidavit of Value.
- Nov. 1-72 Filed Affidavit of Pending Freight.
- Nov. 3—72 Filed Order directing NOTICE to issue and enjoining suits and directing the filing of claims. Return date 12/15/72. Publish in New York Law Journal. Lasker, J.
- Nov. 3—72 Filed ORDER for an interim stipulation. Lasker, J.

# Relevant Docket Entries-Moran's Complaint

DATE

### PROCEEDINGS

- 1 72 Filed Interim Stipulation (\$222,567. Moran Towing & Transportation Co. Inc. and Federal Insurance Co.) Approved as to form and sufficiency. Lasker, J.
- Dec. 4—72 Filed deft CLAIMANT TUG DEVON, INC. ANSWER TO THE COMPLAINT.
- Dec. 4-72 Filed deft Claimant Tug Devon, Inc. Notice of Claim.
- Dec. 11—72 Filed DEFT A. EARL WOOD ANSWER TO THE COMPLAINT.
- Dec. 11-72 Filed Deft A. EARL WOOD CLAIM.
- Dec. 15—72 Filed Notice of appearance for the claimant State of Connecticut Dept. of Transportation A. Earl Wood Commissioner of Transportation by Kenneth N. Tedford Asst Atty General. (See front of docket sheet for address & phone number.)
- Dec. 29—72 Filed Consent Order extending time to file claims of claimant Atlantic Cement Company Inc is extended to 1-10-73 for the filing of any claims shall be deemed to have been filed nunc pro tunc as of 12-15-72. So Ordered 12-27-72 LASKER, J.
- Jan. 3—72 Filed Claim by the Atlantic Cement Company Inc.,

# Relevant Docket Entries-Moran's Complaint

DATE

### PROCEEDINGS

- Jan. 17-73 Filed Claimant Atlantic Cement Company answer to the complaint.
- Jan. 24—73 Filed Order that the defaults of all persons & corporations claiming damages for any & all losses, damages, injuries & destruction done occasioned or incurred by or resulting from the collision between the barge BE-CRAFT & the tug DIANA L. MORAN assisted by the tug DEVON & the Tomlinson Bridge spanning the Quinnipiac River in New Haven Connecticut on 5-17-72, said persons & corps herely are forever barred from filing any claims & or answer in this proceeding. So Ordered 1-23-73, (mailed notice) LASKER, J.
- Mar. 26-74 Filed stip. & order granting leave to file & serve counterclaim upon State of Conn. Dept. of Transportation, et al—Lasker, J.
- Mar. 28-74 Filed counterclaim of pltfs. Moran.
- Nov. 1—74 Filed State of Conn.'s Answer to counter claim.
- Nov. 20—75 Filed Stip & Order the action 72 Civil 4633 & 72 Civil 4929, are consolidated for all purposes & to bear the caption set forth as indicated only under number 72 Civil 4633. Lasker J.

# Relevant Docket Entries-Moran's Complaint

DATE

### PROCEEDINGS

- Sept. 28—76 Filed opinion 45172 . . . Damages resulting from the first collision of the barge and the fender system are to be apportioned between Moran and the State. Moran is solely liable for damage caused to the barge and the bridge by the second collision to the chock and the girder. The Devon is not liable either to Moran or the State. The issue of limitations of liability is reserved until the actual amount of damages is determined. This memo constitutes the Courts findings of fact and conclusions of law.
  - Dec. 1—76 Filed notice of settlement and of counter order with interlocutory degree. Lasker Judgment ent. 11-30-76 CLERK (ent. 12-1-76)
  - Dec. 7—76 Filed notice of appeal from the judgment entered 11-30-76 by Moran Towing & Transportation
  - Dec. 7-76 Filed undertaking on appeal in the amt of 250.00 (Fireman's Fund)
  - Dec. 20-76 Filed designation of exhibits.
  - Dec. 29-76 Filed Claimant State of Conn. designation of exhibits to be trans. to U.S.C.A.

# Relevant Docket Entries— Devon's Complaint

# UNITED STATES DISTRICT COURT 72 Civ. 4929

### In the Matter

### of the

COMPLAINT OF TUG DEVON, INC., as owner of the Tug Devon,

### Plaintiff

### LIMITATION OF LIABILITY

Nov. 17—72 Filed complaint and Stip. for Costs (\$250. by Plaintiff)

Nov. 17—72 Filed Affidavits of No Pending Freight, and of Value.

Nov. 27—72 Filed Ad Interim Stipulation for Value (\$140,000. National Surety Corp.) Approved as to form and sufficiency. Lasker, J.

Nov. 27—72 Filed Order approving Pltf's Stipulation for Value, directing issuance of NOTICE and

restraining suits. Lasker, J. Publish in New

York Law Journal Ret. Date 1/ /73

# Relevant Docket Entries-Devon's Complaint

DATE PROCEEDINGS

- Dec. 15-72 Filed Notice of Appearance for claimant State of Connecticut, Dept. of Transportation, A. Earl Wood, Commissioner of Transportation.
- Dec. 20-72 Filed Claim and ANSWER of Tug Helen B. Moran Inc. and Moran Towing and Transportation Co. Inc. to petition.
- Dec. 29-72 Filed ANSWER of the State of Connecticut to complaint.
- Dec. 29-72 Filed Claim of the State of Connecticut.
- Dec. 29-72 Filed Claim of Atlantic Cement Co. Inc.
- Jan. 17-73 Filed ANSWER of claimant Atlantic Cement Co. Inc. to complaint.
- May 22-74 Filed pltff's counterclaim.
- Nov. 1-74 Filed ANSWER of State of Connecticut to counterclaim of Tug Devon, Inc.
- Nov. 20-75 Filed Stip & Order that the action 72 Civil 4633 & 72 Civil 4929 are consolidated for all purposes & to bear the caption set forth as indicated, only under the number 72 Civil 4633. Lasker J. (Filed in 72 Civil 4633)

. . . .

### UNITED STATES DISTRICT COURT

SOUTHERN DISTRICT OF NEW YORK 72 Civil 4633

In the Matter

-of-

The Complaint of Tug Helen B. Moran Inc., as Owner and Moran Towing & Transportation Co., Inc. as chartered owner of the Tug Diana L. Moran, for Exoneration From or Limitation of Liability.

Plaintiffs, by their attorneys, Burlingham Underwood & Lord, for their complaint seeking exoneration from or limitation of liability, allege upon information and belief as follows:

- 1. Plaintiff Tug Helen B. Moran, Inc. was at all pertinent times and now is a corporation organized and existing under and by virtue of the laws of Delaware, having an office and place of business at 100 W. 10th Street, Wilmington, Delaware, and was owner of the tug Diana L. Moran ("Diana"), which is within this district.
- 2. Plaintiff Moran Towing & Transportation Co., Inc. ("Towing") was at all times hereinafter mentioned and now is a New York corporation, having its office at 1 World Trade Center, New York, New York 10048 and was bareboat

chartered owner of tug Diana L. Moran, which is within this District.

- 3. The Diana is a steel motor tug of 239 gross tons and 162 net tons net register, 105' length overall, 27' maximum breadth, 15' depth, built at Oyster Bay, New York in 1956 with a 1757 brake horsepower diesel electric motor, home port New York, New York.
- 4. On the afternoon of May 17, 1972 the Diana L. Moran left the cement dock in the Mill River, New Haven, with the Atlantic Cement Company barge Becraft in tow astern, assisted by the Red Star tug Devon, bound for Ravena, New York. As the flotilla was proceeding at a prudent speed through the East Haven Reach of the Quinnipiac River the barge came in contact with the fender system and the overhang on the east side of the draw of the Tomlinson Bridge, a bascule bridge owned and operated by the State of Connecticut. Thereafter the flotilla proceeded to Hoboken where temporary repairs were made to the barge before she continued the voyage which terminated at Ravena, New York on May 19, 1972.
- 5. The aforesaid collision and damages were not due to any fault, neglect or want of care on the part of plaintiffs or the Diana, or those in charge of or aboard her.
- 6. The aforesaid collision and damages were occasioned and incurred without the privity or knowledge of plaintiffs.
- 7. Plaintiffs are advised that the value of the Diana at the termination of the voyage as aforesaid was not more

than \$219,167.00. The pending freight on said voyage was not more than \$2,400. Subject to an appraisal of their interest on a reference, plaintiffs offer an interim stipulation for value in the sum of \$222,567.00, said being not less than the aggregate value of plaintiffs' interest in said tugboat, her equipment and pending freight at the end of the voyage.

- 8. As a consequence of the aforesaid collision, the State of Connecticut, as owner of the Tomlinson River Bridge has made a claim against plaintiffs for damages to the bridge in an amount said to exceed \$350,000. In addition, damages were sustained by the barge Becraft, and her owners have also made claim for damages which have been estimated as approximately \$35,000. Plaintiffs do not know the amount of all of the claims arising out of the aforesaid occurrence, but as nearly as can now be estimated, they will exceed the value of plaintiffs' interest in the Diana at the end of the voyage.
- 9. There are no demands or unsatisfied liens or claims of liens against the Diana arising on the aforesaid voyage, or any suits pending thereon, so far as is known to plaintiffs other than set forth above.
- 10. This complaint is filed within six (6) months after the casualty referred to and also within six (6) months after plaintiffs received the first written notice of claim from any claimant.

- 11. Plaintiffs claim exoneration from liability for the losses and damage sustained during the voyage aforesaid and from all claims for damages that have been or may hereafter be made, and plaintiffs allege that they have valid defenses thereto on the facts and the law. Plaintiffs further claim the benefit of limitation of liability provided for in the Kevised Statutes of the United States, and the various statutes supplementary thereto and amendatory thereof, and to that end plaintiffs are ready and willing to give a stipulation with sufficient surety for the payment into Court of the value of their interest in the DIANA L. MORAN and her pending freight whenever the same shall be ordered, as provided by the aforesaid statute and by Rule F, Supplemental Rules for Certain Admiralty and Maritime Claims of the Federal Rules of Civil Procedure, and by the rules and practices of this Court.
- 12. This is an admiralty or maritime claim within the meaning of Rule 9(h) of the Federal Rules of Civil Procedure.

# WHEREFORE, plaintiffs pray:

- (1) That this Court cause due appraisement to be made of the amount or value of plaintiffs' interest in the Diana and her pending freight at the end of the voyage aforesaid;
- (2) That this Court make an order directing plaintiffs to file an interim stipulation to be approved by the Court for the payment into Court, for the benefit of claimants, of the value of plaintiffs' interest in the Diana at the end of

the voyage aforesaid, with interest at the rate of 6% per annum from the date of said security, whenever the Court shan so order.

- (3) That the Court make an order directing the issuance of a notice to all persons asserting claims with respect to which this complaint seeks exoneration or limitation admonishing them to file their respective claims with the Clerk of this Court and to serve on plaintiffs' attorneys a copy thereof on or before a date to be named in the notice.
- (4) That the Court make an order directing that, upon plaintiffs' filing an approved interim stipulation as above provided, an injunction shall issue enjoining the prosecution, as against plaintiffs, their agents and representatives and against the Diana, her engines, etc., of any and all claims, actions or proceedings whether or not already begun with respect to the matters in question except in the present proceeding.
- (5) That this Court in this proceeding will adjudge that plaintiffs are not liable for any loss or damage arising on the aforesaid voyage; or, if plaintiffs shall be adjudged liable, then that such liability be limited to the value of such plaintiffs' interest in the Diana and her pending freight as aforesaid at the end of said voyage, and that plaintiffs be discharged therefrom upon the surrender of such interest, and that the money surrendered, paid, or secured to be paid as aforesaid be divided pro-rata according to the above-mentioned statutes among such claimants as may duly prove their claims, saving to all parties any priorities to which they may be legally entitled, and

that a decree may be entered discharging plaintiffs from all further liability.

(6) That plaintiffs may have such other and further relief as the justice of the cause may require.

Burlingham Underwood & Lord Attorney for Plaintiffs /s/ Robert B. Pohl A Member of the Firm 25 Broadway New York, New York 10004

### State of Connecticut's Claim

### UNITED STATES DISTRIC 'COURT

Southern District of New York Civil Action No. 72 Civ. 4633

In the Matter

-of-

The Complaint of Tug Helen B. Moran Inc., as Owner and Moran Towing & Transportation Co., Inc. as chartered owner of the Tug Diana L. Moran, for Exoneration From or Limitation of Liability.

The claimant, State of Connecticut, Department of Transportation, A. Earl Wood, Commissioner of Transportation, by its attorneys, Attorney General's Office, State of Connecticut, makes the following claim as provided for in Rule F, Supplemental Rules for Certain Admiralty and Maritime Claims of the Federal Rules of Civil Procedure:

- 1. The State of Connecticut, Department of Transportation by 1941 Connecticut Special Act 380 is charged with the maintenance and operation of the Tomlinson Bridge spanning the Quinnipiac River in the City of New Haven, State of Connecticut, on United States Route No. 1.
- 2. On May 17, 1972, the Tug Diana L. Moran owned by Tug Helen B. Moran, Inc. and chartered to Moran Towing and Transportation Company, Inc. was towing, and the

# State of Connecticut's Claim

Tug Devon owned by Tug Devon, Inc. was assisting in the towing of the Atlantic Cement Company barge Becraft.

- 3. The Tug Diana L. Moran through the negligence and carelessness of its operation caused the Becraft to strike and damage the said Tomlinson Bridge.
- 4. The damage to the Tomlinson Bridge as a result of this occurrence is estimated to be \$500,000.00.
- 5. The State of Connecticut, Department of Transportation, A. Earl Wood, Commissioner of Transportation, therefore claims \$500,000.00 for the repair of the said Tomlinson Bridge.

STATE OF CONNECTICUT—DEPARTMENT
OF TRANSPORTATION

A. Earl Wood, Commissioner of Transportation

By: Robert K. Killian
Attorney General
Kenneth N. Tedford
Assistant Attorney General
Transportation Department
State Office Building
165 Capitol Avenue, Rm. 543
Hartford, Conn. 06115

# State of Connecticut's Answer

# UNITED STATES DISTRICT COURT

SOUTHERN DISTRICT OF NEW YORK Civil Action No. 72 Civ. 4633

### In the Matter

### -of-

The Complaint of Tug Helen B. Moran Inc., as Owner and Moran Towing & Transportation Co., Inc. as chartered owner of the Tug Diana L. Moran, for Exoneration From or Limitation of Liability.

- 1. The claimant, State of Connecticut, Department of Transportation, A. Earl Wood, Commissioner of Transportation, alleges that he was without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraphs 1, 2, 3, 7 and 9 of the Complaint.
- 2. The claimant, State of Connecticut, Department of Transportation, A. Earl Wood, Commissioner of Transportation, admits paragraphs 10 and 12 of the Complaint.
- 3. The claimant, State of Connecticut, Department of Transportation, A. Earl Wood, Commissioner of Transportation, denies paragraphs 5, 6 and 11 of the Complaint.
- 4. The claimant, State of Connecticut, Department of Transportation, A. Earl Wood, Commissioner of Trans-

# State of Connecticut's Answer

portation, admits so much of paragraph 4 which states, "the barge came in contact with the fender system and the overhang on the east side of the draw of the Tomlinson Bridge, a bascule bridge owned and operated by the State of Connecticut", and alleges that he was without knowledge or information sufficient to form a belief to the truth of the allegations contained in the remainder of paragraph 4.

5. The claimant, State of Connecticut, Department of Transportation, A. Earl Wood, Commissioner of Transportation, admits so much of paragraph 8 which states, "As a consequence of the aforesaid collision, the State of Connecticut, sowner of the Tomlinson River Bridge has made a claim against plaintiffs for damages to the bridge in an amount said to exceed \$350,000.", and alleges that he was without knowledge or information sufficient to form a belief to the truth of the allegations contained in the remainder of paragraph 8.

STATE OF CONNECTICUT—DEPARTMENT
OF TRANSPORTATION

A. Earl Wood, Commissioner of Transportation

By: Robert K. Killian
Attorney General
Kenneth N. Tedford
Assistant Attorney General
Transportation Department
State Office Building
165 Capitol Avenue, Rm. 543
Hartford, Conn. 06115

### UNITED STATES DISTRICT COURT

SOUTHERN DISTRICT OF NEW YORK 72 Civ. 4633 (M.E.L.)

### In the Matter

--of--

The Complaint of Tug Helen B. Moran, Inc., as owner and Moran Towing & Transportation Co., Inc., as chartered owner of the tug Diana L. Moran, for exoneration from or Limitation of Liability.

Tug Helen B. Moran, Inc., as Owner, and Moran Towing & Transportation Co., Inc. as chartered owner of the Tug Diana L. Moran (hereinafter plaintiffs on the counterclaim), by their attorneys, Burlingham Underwood & Lord, for their counterclaim against the State of Counceticut, A Earl Wood, Commissioner of Transportation (hereinafter defendant on the counterclaim), allege upon is formation and belief as follows:

- 1. This is an admiralty or maritime claim within the meaning of Rule 9(h) of the Federal Rules of Civil Procedure.
- 2. Tug Helen B. Moran, Inc. was at all times hereinafter mentioned and now is a Delaware Corporation having

its office at 100 West 10th Street, Wilmington, Delaware and was owner of tug Diana L. Moran.

- 3. Moran Towing and Transportation Co., Inc. was at all times hereinafter mentioned and now is a New York Corporation having its office at One World Trade Center, New York, New York 10048 and was bareboat chartered owner of Tug Diana L. Moran.
- 4. On the afternoon of May 17, 1972, tug Diana L. Moran left the cement dock in the Mill River, New Haven, with the Atlantic Cement Company barge Becraft in tow astern, assisted by the Red Star tug Devon, bound for Ravena, New York. As the flotilla was proceeding at a prudent speed through the East Haven Reach of the Quinnipiac River, the barge came in contact with the fender system and the overhang on the east side of the draw of the Tomlinson Bridge, a bascade bridge owned and operated by the State of Connecticut. Thereafter the flotilla proceeded to Hoboken where temporary repairs were made to the barge before she continued the voyage which terminated at Ravena, New York on May 19, 1972.
- 5. A complaint seeking exoneration from or limitation of liability was filed by Tug Helen B. Moran, Inc. and Moran Towing & Transportation Co., Inc. in the United States District Court for the Southern District of New York on November 1, 1972 and claims were filed in that proceeding by, among others, Atlantic Cement Company Inc. to recover damages "presently estimated" to total \$35,000 for damage to the Barge Becraft.

- 6. The aforesaid collision and damages occurred without any fault or negligence on the part of the plaintiffs on the counterclaim or either of them or those aboard tug Diana L. Moran or any unseaworthiness of tug Diana L. Moran but resulted from the active fault, neglect and want of care of defendant on the counterclaim in failing to properly maintain and operate the Tomlinson Bridge, together with its appurtenances including its fender system.
- 7. By reason of the premises, plaintiffs on the counterclaim are entitled to recover from defendant on the counterclaim by way of indemnity, contribution or otherwise in respect of any liability that plaintiffs on the counterclaim may suffer or incur for damages to barge Becraft arising out of the aforesaid incident, and defendant on the counterclaim is or may be liable to the claimant, Atlantic Cement Company, Inc., for part or all of said damages.

Wherefore, plaintiffs on the counterclaim pray:

- 1. That this Honorable Court may adjudge and order that defendant on the counterclaim, State of Connecticut, Department of Transportation, A. Earl Wood, Commissioner of Transportation, pay plaintiffs on the counterclaim, by way of indemnity, contribution or otherwise, for any liability for the claims of Atlantic Cement Company, Inc. filed against plaintiffs on the counterclaim in the limitation proceeding herein, together with interest, costs, reasonable attorney's fees and other reasonable expenses.
- 2. That this Honorable Court may require defendant on the counterclaim to appear and defend all claims filed in

the limitation proceeding herein as if said claims had been filed against defendant on the counterclaim in the first instance.

3. That this Honorable Court may grant to plaintiffs on the counterclaim such other and further relief as it may deem just, equitable and proper.

Dated: New York, New York March 13, 1974.

> Burlingham Underwood & Lord Attorneys for Plaintiffs on the Counterclaim

> > /s/ By Robert B. Pohl A Member of the Firm 25 Broadway New York, New York 10004 Telephone: 212—422-7585

### State of Connecticut's Answer to Counterclaim

### UNITED STATES DISTRICT COURT

Southern District of New York 72 Civ. 4633 (M.E.L.)

### In the Matter

of

The Complaint of Tug Helen B. Moran, Inc., as owner and Moran Towing & Transportation Co., Inc., as chartered owner of the tug Diana L. Moran, for exoneration from or Limitation of Liability.

The answer of the State of Connecticut to the counterclaim of Tug Helen B. Moran, Inc., as owner, and Moran Towing & Transportation Co., Inc., as chartered owner of the tug Diana L. Moran, alleges upon information and belief as follows:

First: Admits the allegations contained in article 1 of the counterclaim.

Second: Admits the allegations contained in article 2 of the counterclaim.

Third: Admits the allegations contained in article 3 of the counterclaim.

Fourth: Admits the allegations contained in article 4 of the counterclaim except that it specifically denies that the flotilla was proceeding at a prudent speed. State of Connecticut's Answer to Counterclaim

Fifth: Admits the allegations contained in article 5 of the counterclaim.

Sixth: Denies each and every allegation contained in article 6 of the counterclaim.

Seventh: Denies each and every allegation contained in article 7 of the counterclaim.

Further Answering the Counterclaim and as a Defense Thereto the State of Connecticut Alleges:

Eighth: That it is one of the sovereign states of the United States and is entitled to the defense of sovereign immunity.

WHEREFORE, the State of Connecticut prays that the counterclaim be dismissed, with costs, and for such other and further relief as may be just and proper in the premises.

BIGHAM, ENGLAR, JONES & HOUSTON
By DONALD M. WAESCHE, JR.

A Member of the Firm
Attorneys for the State
of Connecticut
Office & P.O. Address
99 John Street
New York, N.Y. 10038

# Extracts From Stenographer's Minutes

# UNITED STATES DISTRICT COURT

SOUTHERN DISTRICT OF NEW YORK 72 Civ. 4633

In the Matter

of

The Complaint of Tug Helen B. Moran, Inc., as owner and Moran Towing & Transportation Co., Inc., as chartered owner of the Tug Diana L. Moran, for exoneration from or Limitation of Liability.

In the Matter

of

The Complaint of Tug Devon, Inc., Plaintiff, as owner of the Tug Devon, for Exoneration from or Limitation of Liability.

> New York, New York. December 22, 1975—10:30 A.M.

Before:

HONORABLE MORRIS E. LASKER,

District Judge.

# Appearances-Proceedings

### APPEARANCES:

Burlingham, Underwood & Lord, Esqs.,
Attorneys for Moran Towing & Transportation Co.,
Inc. and Tug Helen B. Moran, Inc.

ROBERT B. POHL, Esq., and WALTER HINTON, Esq., of Counsel.

BIGHAM, ENGLAR, JONES & HOUSTON, ESOS., Attorneys for the State of Connecticut

Donald M. Waesche, Esq., and Jeffrey Gill, Esq., of Counsel.

McHugh, Heckman, Smith & Leonard, Esqs., Attorneys for Tug Devon, Inc.,

RICHARD MEYER, Esq., of Counsel.

THACHER, PROFFITT & WOOD, Esca., Attorneys for Atlantic Cement Company, Inc.,

Dwight B. De Meritt, Jr., Esq., of Counsel.

The Court: I read your brief on that and I understand that. What do you say to their statement in their brief, which doesn't discuss the question of whether it violated the construction plans or not, but which does [6] say you

-5-

brought the barge through there regularly for the last two years without any problem?

--11---

All right, Mr. Pohl, call your first witness. Mr. Pohl: Captain Calrin, please.

George L. Calain, Jr., called as a witness by Moran, being first duly sworn, was examined and testified as follows:

# Direct Examination by Mr. Pohl:

Q. Your name is George L. Calain? A. Yes, sir.

[12] Q. What is your address? A. Route 1, Box 109, Elkins, West Virginia.

Q. How old are you, Captain? A. Forty-six.

Q. By whom are you employed? A. Moran Towing & Transportation.

Q. As what? A. As captain of the Tug Diana Moran.

Q. How long have you been in the employ of Moran Towing & Transportation Company, Inc.? A. Four and a half years.

Q. Who was your prior employer? A. Tracy Towing

Line.

Q. How long were you with Tracy Towing Line? A. Twenty years and four months.

Q. What was your job with Tracy? A. Well, I started as deck hand and worked my way up to mate and captain, which I retained until the company went out of business.

- Q. Do you have any licenses? A. Yes, I do.
- Q. What are they? A. Pilot, first class pilot, New York Harbor.
  - Q. How many tons? [13] A. 500 gross tons.
- Q. And do you recall approximately when that was issued? A. 1958, May of 1958.
- Q. On May 17, 1972, were you serving on a tugboat? A. Yes, sir.
  - Q. Which one? A. Tug Diana Moran.
- [14] Q. How many men in her crew? A. Seven men.
- Q. What is the horsepower of the Diana Moran? A. 1750.
- Q. What is her approximate length and breadth? A. Approximately 100 feet long and 28 feet wide.

[15] \* \* \* \*

- Q. Are you familiar with a barge called Becraft? A. Yes, sir.
  - Q. What type of a barge is she? A. A dry cement barge.
- Q. Do you know her approximate dimensions? A. Yes, sir. She is 290 feet long, 55 feet wide.
  - Q. Is she a manned or unmanned barge? A. Unmanned.
- Q. The Tug Devon, do you know her approximate horse-power? A. She's approximately the same as the Diana.
  - Q. And her approximate length? A. 94 feet long.
- Q. On May 17, 1972, did the Diana Moran have a job [16] involving the Becraft? A. Yes, sir.
- Q. What was the job? A. To tow the barge Becraft from Atlantic Cement Company in New Haven, Connecticut, to Atlantic Cement dock in Ravena, New York.

Q. Ravena is up the Hudson by Albany, is that right?
A. Yes.

Q. Where did the Diana Moran find the Becraft on that day? A. She was in the Mill River in East New Haven.

Mr. Pohl: If the Court please, at this time I have a navigation chart I would like to put in evidence. This has been premarked Moran Exhibit 6 for identification.

(Moran Exhibit 6 was received in evidence.)

[18]

Q. Were any vessels assigned to assist the Diana in this operation? A. Yes, sir.

Q. What? A. The Tug Devon.

[19]

Q. Did you have occasion to go aboard the Becraft after the tug came alongside? A. Yes, sir.

Q. Did the Diana thereafter make fast to the Becraft? A. Yes, sir, we did.

Q. By how many lines? A. Two lines.

Q. Will you describe those lines? A. Yes, sir. They are 7-inch nylon, what we call a gate line.

Q. What was the condition of those lines? A. They were in good condition.

Q. Where were the lines made fast on the tug? A. They were led through the main bitts on the after part of the tug and over to the side and made fast.

Q. From the tug the line then led towards the barge, is that right? A. Yes, sir.

Q. How did they lead toward the barge and where were they made fast on the barge? A. They were led up around the outboard corners [20] of the barge up onto bitts—which are called bitts, where the eyes of the lines were placed on the bitts.

Q. As made up, what was the distance from the stern of the Diana to the Becraft? A. About 15 or 20 feet.

Q. The barge was being towed stern first, is that right? A. Yes, sir.

Q. Where was the Devon's position? A. His position was on the other end of the tow.

Q. How did she make up? A. She made up in a similar fashion, only his bow was up against the after end of the tow.

Q. How many lines led from the Devon to the barge?
A. Two lines.

Q. Where were they made fast on the Devon? A. They were made fast on his bow quarterside bitts.

Q. One on the port side and one on the starboard side? A. Yes, sir.

Q. Where did they lead to on the barge? A. They led up around the corners and onto a same set of bitts like on the other end.

[22]

Q. What was the relationship between the level of the Devon's pilot house and the level of the barge deck? A. The level of the Devon's pilot house was below the level of the deck of the barge

Q. What were the weather conditions? A. They were good.

- Q. What was the state of the current? A. It was the last of the floodtide.
- Q. Does that mean the current was with you or against you as you were coming out? A. It was against us.
- Q. Had you performed this job as pilot on prior occasions? [23] A. Yes, sir.
- Q. Approximately how many times? A. Four or five times.
- Q. You have indicated you were riding the Becraft, is that correct, sir? A. Yes, sir.
- Q. Did you have any means of communicating with the tug? A. Yes, sir.
  - Q. What means? A. We had a VHF portable radio.
  - Q. What channnel did you use? A. Channel 13.
- Q. Was the Diana capable of receiving Channel 13? A. Yes, sir.
  - Q. Was the Devon so capable? A. Yes, sir.
- Q. For what reason were you riding the barge! A. [24] Well, I was riding the barge because of the visibility of the tugs not being able to see over the barge and to inform them of such.
  - Q. Were you in charge of the operation? A. Yes, I was.
  - Q. You were the pilot, right? A. Yes, sir.
- Q. Was anybody on the deck of the barge with you? A. Yes, sir.
  - Q. Who? A. One deck hand, Robert Maynard, III.
- Q. And what was his job? A. His job was to take the lines in from the dock and make the lines from the tugs fast to the barge.

- Q. Who was in charge of the navigation in the pilot house of the Diana Moran? A. Mate Peter Burns.
  - Q. Had you been with him before? A. Yes, sir.
  - Q. On this job? A. Yes, sir.

[25]

- Q. What was the first bridge you had to pass through?

  A. Chapel Street Bridge.
- Q. What type of a bridge is the Chapel Street Bridge? A. It is a swing bridge.
  - Q. What is the horizontal clearance? A. 72 feet.

[26]

- Q. After transiting the Chapel Street Bridge, was it necessary for your flotilla to pass through another bridge? A. Yes, sir.
- Q. What bridge is that? A. The Tomlinson Street Bridge.
- Q. Was a single blown to the Tomlinson Bridge? A. Yes, sir.
- Q. By whom? A. By Peter Burns on the tug Diana Moran.
  - Q. What was the signal? A. Two blasts of the whistle.
- Q. What did the Tomlinson Bridge do? A. I didn't hear whether he answered him or not, but he proceeded to open.
  - Q. He opened his leaf? A. Yes, sir.
- Q. What type of a bridge is Tomlinson Bridge? A. It is a bascule type.
- Q. The leaves raise up in the middle, is that right, sir? [27] A. Yes, sir.

- Q. How many leaves were there at the time of this accident? A. There were two leaves.
- Q. One on the right side and one on the left side? A. Yes, sir.
- Q. What is the width of the draw between those leaves?
  A. 126 feet.

The Court: Between the leaves, you mean— Mr. Pohl: I should have phrased that question, what is the width of the draw at the water level, your Honor.

The Court: Thank you.

- Q. What is the width of the draw at the water level?

  A. 126 feet.
- Q. And when the leaves were elevated, what angle did you estimate them to be at? A. About 65 degrees.
  - Q. Was that by an instrument? A. No, sir.
  - Q. By eye? A. By eye.
- [28] Q. Tell us what you did after clearing the Chapel Street Bridge and after blowing for the Tomlinson Bridge to open. A. Well, as we approached the Turnpike Bridge, we have to make a 90 degree turn.
- Q. In which direction? A. To the right. And I radioed to the tug Devon, Charlie Quarry answered me by radio, to go half astern on his engines.
- Q. What was the purpose of ordering the Devon half astern? A. To slow the whole unit down in its speed and as he backed to port to help swing the unit around to shape us up to go through the bridge.

Q. When you say "back to port," perhaps you can explain that. How many propellers does the Devon have?

A. She has one propeller.

Q. When a single screw tug puts her propeller astern, how does that affect the tug? A. It backs to port.

Q. It moves the stern of the tug to the left? A. Yes, sir.

[29]

- Q. After you gave the Devon this order and she acknowledged receipt of the order, then what happened? A. Well, when we got the units turned in our turn and ready to approach the Tomlinson Street Bridge and the unit was almost to a standstill at that particular time, and I thought we were fairly shaped up to go through the bridge, I ordered the Devon to stop his engines.
- Q. Approximately how far was the forward end of the Becraft then from the Tomlinson draw? A. About 400 feet.

Q. How was the Becraft then shaped up for approaching the Tomlinson draw? A. It was shaped up in fairly good shape. We was favoring the left-hand side of the Tomlinson Street Bridge to some extent.

Q. Why do you do that? A. Because of a king post that is on the port side of the barge that extends up from the deck.

Q. I show you a photograph marked Moran Exhibit 47 for identification and I ask you if you can identify the vessel shown in that picture. A. Yes, sir, the tug Diana Moran and the barge Becraft.

- Q. Does that photograph show the king post? A. Yes, sir, it does.
- Q. Will you please take this black pen and draw an arrow to the king post. Please do not obliterate the king post.
- Q. And at the end of the arrow will you please write [31] the word "king post."

(Witness writes.)

(Moran Exhibit 47 was received in evidence.)

The Court: You said a little while ago in [32] your testimony, Captain, that the Becraft was shaped up in fairly good shape favoring which side?

The Witness: The east side, to your left.

The Court: Because of the king post?

The Witness: Yes, sir.

The Court: Was there a king post on the left also?

The Witness: No, it was on the right.

[33]

Q. And as the barge approached the Tomlinson Street draw, can you estimate the speed of the flotilla over the bottom? A. Yes, sir. She was going one and a half to two knots.

Q. As the barge entered the draw, where were you stationed? A. I was in the same place I had been.

Q. That is on the starboard side? A. Yes, sir.

Q. About midship? A. About midship.

Q. Tell us what happened as the barge entered the draw? A. I saw that the unit was sliding a little more to the left than it should be, but as I glanced over that way I couldn't see anything it might contact.

Q. The unit got to the left, you are saying? [34] A. Yes.

The Court: When you say the unit, do you mean the barge or the flotilla?

The Witness: The barge.

Q. And what happened then when the barge got to the left? A. It struck the bridge at some place around midships. I had no way of knowing where it was.

Q. When you say it struck the bridge, it didn't strike

the girders at this time? A. No, sir.

Q. What part of the bridge structure was contacted? A. It was the cribbing or foundation of the bridge, the granite on the foundation of the bridge.

Q. And this was which side of the barge made that contact? A. It was the port side of the barge as it was being towed.

Q. Could you feel it? A. Yes, sir.

Q. I show you a photograph marked Moran Exhibit 12 for identification. Can you tell us what that photograph shows? A. Yes, sir. It has the northeast corner of the [35] Tomlinson Street Bridge.

Q. Is that the corner that was contacted by the port side midships of the barge? A. Yes, sir.

Mr. Pohl: I offer Moran Exhibit 12 in evidence. Mr. Waesche: I have no objection to the introduction of this exhibit in evidence with the one res-

ervation, that it does not represent the condition of the fender system at the time of the contact.

The Court: When was the photograph taken?

Mr. Pohl: The photo was taken afterwards. I am going to ask the witness a question about what it represents. This photo was taken after the casualty.

The Court: Is it to show the condition or merely to show this place?

Mr. Pohl: Merely to show this place.

Mr. Waesche: For that I have no objection.

Mr. Meyer: No objection.

(Moran Exhibit 12 was received in evidence.)

The Court: Did you hit the stone part here?

The Witness: Yes, sir.

The Court: I see. Okay. Thank you.

- Q. What happened after this contact between the port side of the barge and some area of the bridge? A. Well, [36] the barge, when it hit, it automatically veered out into the channel.
  - Q. In which direction? A. To the right.
  - Q. It bounced off? A. Yes, sir.
- Q. How far, if you can approximate? A. Approximately two or three feet, or even more, because it was quite a distance.
- Q. Meanwhile, what was the Diana Moran doing? A. Maintaining course and speed.
- Q. So the barge is still moving through the bridge? A. Yes, sir.

Q. When it bounced off, what did you do? A. Well, I automatically looked over in that direction from where I was standing—

The Court: Which direction? The Witness: To my left.

The Court: Yes?

The Witness: And I was observing what was on the deck of the barge, protruded up from the deck of the barge, and I saw back over the stern of it a big puff of smoke from the Devon, and I didn't know what might have [37] happened back there, but what I could see it was still clearing the bridge, but all of a sudden it came back a little more and the Old Man chock made contact with the bridge.

The Court: The old what?

The Witness: Old Man chock.

The Court: What is it?

Mr. Pohl: If the Court please, this is an appurtenance which protrudes above the deck of the barge. I will have a photograph.

Q. You say that you saw a puff of smoke? A. Yes, sir.

Q. And what did the barge do? A. It moved back in towards the left, towards the bridge again.

Q. And meanwhile the barge was continuing through, [38] ahead? A. Yes, sir.

Q. And then the Old Man chock struck what? A. Struck the girder on the underside of the bridge.

Q. Could you physically then see any part, any structure, of the Devon? A. No, only the mast, that's all.

[39]

Q. Did you feel anything? A. Yes, sir.

Q. Describe that. A. It was quite a jolt on the whole barge.

Q. What happened to the forward motion of the barge? Did it impede it at all? A. Oh, yes, when the Old Man chock hit the girder, it almost came to a stop.

Q. The chock which struck the girder was on which side of the barge as being towed? A. It was on the port side.

Q. What is the height of this chock? A. The chock itself stands four feet off the deck.

Q. And the chock is right alongside the side, is that right?
A. Yes, sir.

Q. I show you a photograph marked Moran Exhibit 48 for identification, and I ask you if you can tell which vessel that is. [40] A. Yes, sir. That is the barge Becraft.

Q. I point to a structure on the deck of the barge and ask you if that is the type of chock which engaged the girder? A. Yes, sir, it is.

Q. Will you put the letter "A" above that? Better than that, will you write the word "chock" above that?

(Witness writes.)

Q. You have done that and drawn an arrow to it.

Mr. Pohl: I offer Moran Exhibit 48 for identification in evidence as showing the type of chock which engaged the girder.

Mr. Waesche: I have no objection. Again, if you would, please, Mr. Pohl, identify the other objects in the photo.

Q. Perhaps you can identify a bridge in the background.
A. Yes, sir. That is the Connecticut Turnpike Bridge.

Q. Perhaps you can identify a structure on the far right side of the photograph? A. Yes, sir. That is the east side of the Tomlinson Street Bridge.

Mr. Pohl: Is that satisfactory, Mr. Waesche?

[41] Mr. Waesche: Yes, thank you.

May the record also indicate that that photograph was taken June 1, 1972.

Mr. Pohl: Agreed.

(Moran Exhibit 48 was received in evidence.)

Q. I show you another photograph. Can you identify the vessel in that photograph? A. Yes, sir.

The Court: What number is that?

Mr. Pohl: I am sorry, sir. This is Moran Exhibit
49 for identification.

A. Yes, sir. It is the barge Becraft.

Q. Does that show any part of the chock which engaged the girder? A. Yes, sir.

Q. Will you draw an arrow to that, please?

(Witness writes.)

Q. And write "part of chock."

(Witness writes.)

Q. Has some portion of the chock been removed in that photograph, sir? A. Yes, sir.

Q. Could you sketch in where the chock had originally ben? [42] A. Yes.

Q. Please do so in black pen.

(Witness writes.)

Mr. Pohl: You have done that with dotted lines and a circle in the middle.

1 offer Moran Exhibit 49 in evidence.

(Moran Exhibit 49 was received in evidence.)

Q. Then after the chock struck the girder, did the unit proceed all the way through the draw? A. Yes, sir, it did.

431 • • • •

[43] Q. Before leaving the barge Becraft, did you look at the chock which had engaged the girder? A. Yes, sir, I did.

Q. What part of the chock was damaged? A. Oh, about six inches from the top of it had even hit the bridge.

[45]

Q. Prior to the Devon pulling the after end of the barge back under the leaf, did you think the barge was going to clear? A. Yes, sir.

Q. What is the basis for that statement? A. Well, as I looked across the barge to my left I could see that every-

thing that protruded up above the deck seemed to be clearing the bridge all right.

Q. When you saw the smoke from the Devon, where were you standing? A. In approximately the same position I had been standing.

Q. That was on which side? A. It was on the starboard side of the barge as being towed.

Q. How close to the very edge of the barge? A. Oh, about four feet from the edge.

[47]

Q. Was the Tomlinson Bridge equipped with a fender system? A. Yes, sir.

Q. What were the fenders built of? A. Wood.

Q. Can you describe the condition of the fenders on the northeast corner prior to the collision of May 17, [48] 1972? A. They were all broken away and in a deteriorated fashion.

Q. I show you a photograph marked Moran Exhibit 12. Does that show the northeast corner of the Tomlinson Bridge? A. Yes, sir.

Q. How did the fenders, when you passed through there before the collision of May 17th, compare with what you see in that photograph? A. They were in similar fashion as they are in this photo.

Q. How long had they been in that fashion? A. Oh, I would say a month or two anyway.

Mr. Waesche: May I see it, please? The Court: How do you know?

The Witness: Because we had traveled through there prior to this.

The Court: And you observed them?

The Witness: Yes, sir.

Q. Did this condition of the fenders at the northeast corner contribute to the chock engaging the girder? A. Yes.

Mr. Waesche: I object, your Honor. [49] The Court: On what ground?

Mr. Waesche: The witness has testified that from where he stood he could not observe the contact. I don't believe he has knowledge as to that question.

The Court: Let's hear what he has to say. If he doesn't, it is meaningless.

Q. Explain your reason, sir. A. Well, if the cribbing—the fender system, as we call it, for the bridge would have been in proper condition as it should be, when we contacted this we would have contacted the cribbing alone, which I don't know, say it protrudes three feet or four feet out from the granite abutment on the bridge, and if the cribbing would have been there when we hit this, the barge would have deflected to the right a lot more than what it did to begin with.

Q. I see.

The Court: You would have bounced earlier, is that what you mean?

The Witness: No, sir, not necessarily earlier, but we would have three or four foot farther out into the channel when we first hit. George L. Calain, Jr.-for Moran-Cross

The Court: Farther to the right?

The Witness: Yes.

The Court: And therefore the check wouldn't

have [50] engaged, is that your theory?

The Witness: Yes, sir.

[52]

Cross-Examination by Mr. Meyer:

[65]

Q. Is there some other reason, then, that the barge was in that shape? A. No, the only thing, like I said, we was favoring the left-hand side of the bridge coming through and the Devon, what position he was laying at after we completed our turn, I don't know, because I had walked midship and I couldn't see. I couldn't see after we completed the turn what position he might be lying in at that time.

Q. Now, was there anybody else on board the barge with you? A. Yes, sir.

Q. A deck hand by the name of Maynard? A. Yes, sir. [66] Q. Was he assigned any particular job during the transit? A. No, sir, just what I spoke of before.

Q. What did you speak of before? A. To take the lines from the tugs and to let the lines go from the dock and to do it the opposite way when we got out to turn the barge around in the harbor.

Q. So essentially he had no duty, really, when the barge was under way? A. No, sir, but there is no way of him

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getting off the barge. We need him there when we get out in the harbor.

[67]

Q. At the time of the first contact, were you standing near the king post? A. Yes, sir.

Q. How far away? A. Oh, I have no way of knowing. I would say 15 feet, twenty feet.

Q. You testified that the horizontal clearance from the draw is 126 feet, is that so? A. Would you repeat that?

Q. Is the horizontal distance in the draw of the Tomlinson Bridge 126 feet? A. At the water's edge, yes.

Q. At the water's edge? A. Yes.

Q. And the breadth of the Becraft is what? A. 55 feet.

Q. Which is a difference of about 71 feet, isn't that so, between the breadth of the Becraft and the breadth of the horizontal clearance in the Tomlinson draw? A. Yes, sir.

[68]

Q. Is there anything that could have prevented you from walking across the Becraft and looking down to see what the Becraft had contacted? A. Well, yes, sir, there are obstructions on the deck of the barge. You could walk across. You couldn't run or anything like that.

Q. You could have walked across? A. Yes, sir.

[69]

Q. Do you think you would have had a better perspective as to whether or not that chock was going to clear by walking to the port side of the barge? A. From the time of the

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first initial contact, when I looked in that direction there wasn't time to walk 55 feet from one side of the barge to the other.

Q. Let me ask you that.

The Court: How much time do you say there was from the first contact, as we have been calling it, until the collision?

The Witness: Half a minute or so.

[70]

Q. You testified that after the first contact the Becraft automatically veered out. Now, what do you mean automatically? Are you suggesting every barge will bounce off an obstruction? A. Yes, sir. A light barge.

Q. Did you physically see the barge bounce off the abutment? A. Yes, I did.

[71]

Q. How far in feet or inches, or what have you, did the Becraft move away from the abutment after the first contact? A. Oh, I'd say two or three feet or maybe some more. I have no way of knowing, but it was quite a distance, I know that.

[73]

Q. What made you assume that the Devon backed her engines? A. Because after the first contact the barge started going back towards the bridge again.

## George L. Calain, Jr.-for Moran-Cross

[74] Q. How long did it take for the barge to move back against the bridge? A. Simultaneously. Everything is in a movement. When you are in movement in water like that everything is in a cycle. There is no way—

[79]

Q. Captain, given the fact that the Becraft struck the abutment about amidship, do you feel she was properly shaped at that time to make the passage through the draw?

A. Would you repeat it, please?

Q. Given the fact that the Becraft struck the easterly abutment about amidships, do you feel she was properly shaped to make the passage of the draw at the time [80] of the first impact? A. Yes, sir, I do.

Q. Had the Becraft ever made contact with either abutment at any time prior to the accident date when you made the transit through the draw? A. Not to my knowledge, no.

[83]

Cross-Examination by Mr. Waesche:

[86]

Mr. Pohl: I have two witnesses who have to leave at the end of the day. I would like to interrupt Captain Calain's testimony and put these two people on.

Mr. Waesche: Agreeable. Mr. Meyer: No objection.

Peter J. Burns, called as a witness by Moran, being first duly sworn, was examined and testified as follows:

## Direct Examination by Mr. Pohl:

- Q. What is your address, Captain Burns? A. 480 Main Street, West Haven, Connecticut.
  - Q. How old are you, sir? A. Fifty-eight.
  - Q. By whom are you employed? A. McAllister Bros.
  - Q. As what? A. Mate.

[87]

- Q. When did you commence serving as a tug mate? A. Same time I got the license.
  - Q. 1945? A. Yes.
- Q. When did you join the employ of Moran Towing & Transportation Company? A. December '71.
- Q. How long did you remain in the employ of Moran?

  A. I believe it was May of '73.
- [88] Q. On May 17, 1972, were you serving on a tugboat? A. Yes, sir.
  - Q. What tugboat? A. The Diana L. Moran.
  - Q. What was your position? A. I was the mate.
- Q. Had you ever towed the Becraft before you joined Moran? A. Yes, sir.
- [89] Q. When was that? A. Oh, four, five years prior to that.

- Q. What was her name then? A. Triangle No. 1.
- Q. On May 17, 1972, did the Diana Moran have a job with the Becraft? A. Yes, sir.

[90]

- Q. As made up, were your eyes as you stood in the Diana's pilot house above or below the deck of the Becraft?

  A. Below.
- Q. Had you performed this job on other occasions? A. Yes.
  - Q. With Captain Calain? A. Yes.

The Court: You mean for other barges or are [91] you talking about the Becraft? I know that had happened once before. You mean other barges? The Witness: Yes, other barges and the Becraft.

Q. During the operation, where did you physically station yourself? A. In the pilot house of the Diana Moran.

[93]

Q. Tell us what happened as you proceeded down the channel after clearing the Chapel Street Bridge? A. Well, as we proceeded down towards the fork in the river, there is a turn you must make around the bridge abutment of the Turnpike Bridge, and as we were going down there easy, the bridge was opened up—

The Court: The Tomlinson Bridge?

The Witness: The Tomlinson Bridge was opened, I proceeded down slow the same speed, didn't touch the speed. Then as we got down a little ways I heard George Calain give the Devon orders to back.

Q. You heard that over your radio? A. Yes.

Q. And what happened after that? A. Well, when he has that tug backing, I come shape the tug in the forward end of the tow for the Tomlinson Street Bridge.

Q. In what direction was your flotilla turning? A. Turning to the right.

[94] Q. Do you know the purpose of the order to the Devon to back? A. Yes.

Q. What was its purpose? A. The purpose is to check the way on the flotilla, plus pull t'at port stern end around to shape it up square for the Ton. ason Street Bridge.

Q. Did you subsequently hear another order to the Devon? A. Yes.

Q. What was that order? A. "Stop the engines."

Q. Given again by the pilot? A. By George Calain.

Q. At that time where generally was the Becraft? A. Just about under the Turnpike Bridge.

Q. And the Diana's engines were at what speed? A. About 50, the same. I didn't touch the speed.

Q. And as you approached the Tomlinson Street draw, what was the speed of the flotilla? A. About one and a half to two knots tops.

[95] Q. Would that be over the bottom? A. Yes.

Q. How did that speed compare with the speed on the other occasions that you participated in this operation? A. Just about the same.

Q. Did the Diana thereafter enter the draw? A. Yes.

Q. And then what happened, sir? A. Well, the Diana went through the draw and I tried to keep the end of the two just about the middle of the bridge, which I was doing

with good success. As I got the Becraft better than halfway through the bridge, the barge took a sheer to the right.

Q. Which part of the barge? A. The end I was towing, stern end.

Q. Which was, however, the bow for this passage, is that right?

#### The Witness: Yes, sir.

#

Q. And what did you do, if anything? A. I just gave the Diana a momentary increase in speed.

Q. You increased the rpm? A. Yes.

Q. To what? [96] A. About 100 revolutions.

Q. For roughly how long? A. Two, three seconds.

Q. What was the purpose of that momentary increase in rpm? A. To break that sheer to the starboard in order to keep the end of the tow, the barge, right in the middle of the bridge.

Q. Is that a normal way to break a sheer? A. That's it.

Q. Did you do this under any order from Captain Calain? A. No, sir.

Q. You did it on your own? A. Yes, sir.

Q. Why did you do it on your own? A. Well, I'm up there where I can see what's going on and he is back on that barge and he can't see, and it is my duty to watch that bow end.

Q. By "bow end" you mean the end being towed first? A. Yes.

1971 \* \* \* \* \*

Q. After you put the throttle ahead, how long did you leave it ahead? A. Two or three seconds.

- Q. What did you then do with the throttle? A. Brought it back to about 50 revolutions.
- Q. What happened after that? A. Well, just about when I did that, I heard a crash.
  - Q. What did it sound like? A. Iron to iron.
- Q. Then what happened? A. Just right after that, she sort of stopped.
- Q. By "she" you mean who? A. The Becraft. The Becraft sort of stopped momentarily and then the Diana parted the port gate line.
  - Q. Did you hear that gate line part? A. Yes.

[98]

Q. What did you do, if anything? A. I proceeded a little to the right and I told Calain, I said, "George, we just parted the port gate line."

He said something like, "Well, we hit the bridge. It looks like she's clear now."

And then I proceeded out at the very same speed without touching the throttle.

[99]

Q. I am talking about the chock that was damaged, did you look at it? A. Yes.

Q. About how much of it was dented? A. About six inches from the top.

[100]

Q. Was the Tomlinson Bridge equipped with a fender system? A. Yes.

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Q. Did you on this day, as you were proceeding through the brige, notice the fender system and its condition at the northeast abutment? A. Yes.

Q. What was the condition of the fender system at the northeast abutment? A. In plain English, deplorable.

Q. I show you a photograph marked Moran Exhibit 12. [101] Can you identify that photograph? A. Yes.

Q. Does it show the Tomlinson Bridge? A. Yes.

Q. The northeast abutment? A. Yes.

Q. On May 17, 1972, as you were proceeding through the Tomlinson Bridge, how did the condition of the fenders at the northeast corner compare with the fenders portrayed in that photograph? A. Just about like it is here.

Q. Had it been that way, to your knowledge, for any length of time? A. Quite a while.

The Court: When you say "quite a while," could you give me an estimate, Captain?

The Witness: I would say a couple of months anyway; two months anyway.

The Court: You know by having taken that passage for the two months prior to May 17?

The Witness: Yes.

[102]

Cross Examination by Mr. Meyer:

Q. Mr. Burns, how many times had you been in the pilot house of the pulling tug when removing the barge Becraft

## Peter J. Burns-for Moran-Cross

from the cement dock in New Haven Harbor prior to the accident date? A. Four or five.

The Court: Any pulling tug or the Diana Moran? Mr. Meyer: Any pulling tug.

A. Four or five.

[109]

Cross Examination by Mr. Waesche:

[116]

Q. Mr. Burns, I am going to show you Exhibit 12, Moran Exhibit 12. You testified that that picture correctly depicted the fender system on the northeast corner as it existed on May 17, 1972, did you not? A. Yes.

[117] Q. Do you mean to say that there were absolutely no timbers between where I place an X and where I place a Y? A. Either that day or a long time before that.

- Q. Nothing? A. Nothing.
- Q. You are sure of it? A. Positive.
- Q. There were no whalers; there was no shielding? A. Nothing.
- Q. There was no extension of a catwalk going out? A. No.
- Q. Nothing? A. Not for a couple of months before this happened.

Q. You are positive of that? A. Positive.

[118] WILLIAM F. WATKINS, called as a witness by Moran being first duly sworn, was examined and testified as follows:

#### Direct Examination by Mr. Pohl:

- Q. What is your address, Mr. Watkins? A. Business address, 29 John Street, New York City.
- Q. What is the nature of your business? A. Marine surveying, marine consulting.
  - Q. Are you self-employed? A. Self-employed, yes.
- Q. How long have you been a marine surveyor? A. The total time of my lifetime, probably about 30 years. As a self-employed surveyor, since 1962.
- Q. What sort of surveys have you made? A. All types of surveys on marine equipment, floating craft, docks, piers, bridges, ships, tugs, barges.
- Q. Did you have occasion to survey the Tomlinson Bridge following a casualty in May 1972? A. Yes, sir.
- Q. Do you recall the date of your first attendance? A. It was May 19, 1972.

[119] • • •

- Q. Can you tell us generally, Mr. Watkins, how this bridge is raised, how the leaves are elevated? A. Well, the bridge was a bascule-type bridge and are raised by electric motors driving gears.
- Q. What stops the power to stop the elevation of the leaves? A. They stop the power manually. They have a cutoff switch when in the control tower they hear the switch relay go in the control box, then the bridge operator stops the bridge manually.

Q. And if he didn't stop it manually, would something else stop it? [120] A. I would assume that the cutoff switch would stop it.

Q. By "cutoff switch," is that what is referred to as a

limit switch? A. Or a limit switch, right.

[124]

Q. When you arrived at your survey on May 19, 1972, was the bridge in the down position or an elevated position? A. All sections were down except for the damaged section.

Q. That was the leaf on the east side? A. The east side leaf, the north half was up.

Q. The leaf was up. Did you measure the angle of that leaf? A. Yes, I did.

Q. By the same means you have just described? A. Yes, sir.

Q. What was the angle between the deck of the roadway and the true horizontal of the earth? A. Between 55 and 58 degrees.

Q. Did you have any conversation with any representative of the State at that time? A. We discussed the bridge, the operation.

Q. Was anything said about whether the leaf had been moved since the collision? A. No, they stated that the leaf had not been moved, [125] but I don't know. In other words, it was two days, so whether they did or they didn't—

The Court: Do you remember who you spoke to? The Witness: Yes, two men representing the State. Dr. Robert Norton and Mr. Thomas Heffernan.

Q. Mr. Watkins, there has been testimony through the deposition of the bridge tender not yet in evidence, but it will be put in, that he had a dial in his control room which

showed the leaf elevated to an angle of, say, 65 or 67 degrees at the time of the May 17, 1972 collision.

During the survey that you made on this bridge on May 19, did you find any evidence of a 67 degree angle to which this bridge was raised? A. Well, the dial indicators in the control house, there is a mark on them, a piece of paper on the top, at about 65, 67 degrees which is a guide for the bridge operator that he knows when the indicator arm indicating the angularity of the leaf approaches this, that he will hear the electric gear which is on the south side of the cutoff switch or the limit switch which is attached to the trunnion cutout.

Then he stopped the bridge. Apparently there is a noise of some kind that he can hear.

The Court: Mr. Pohl is asking you a somewhat [126] different question.

Q. My question to you is, does the setting on the dial mean, based upon your examination of the bridge, that the leaf gets to 67 degrees with the true horizontal when the dial says 67 degrees? A. No, sir, it does not.

The Court: How did you come to the conclusion that when the dial says 67 degrees that doesn't mean that the bridge leaf was necessarily at 67 degrees?

The Witness: Because I measured it, sir. The dial was at 67.

The Court: The dial was at 67 when you measured it and it was 55 or 58?

The Witness: That's right.

Q. Explain the 67 degree angle with reference to the bottom portion of the leaf as you were going to? A. I think the only way that I could do that is to draw a sketch of the girder.

[127]

Please let me have that piece of paper and I will have it marked.

(Moran Exhibit 50 was marked for identification.)

Q. On Moran Exhibit 50, you have drawn a shape. What does that shape represent? A. This represents the span or one of the girders for the leaf section on the east side on the north end of the bridge, the general configuration of the bridge structure itself.

The lower portion of the girder has an angle with the horizontal of 12 degrees 43 minutes and 57 seconds, according to the structure drawing of the bridge, so that if the bridge itself is raised from the horizontal, a line horizontal to the roadway, is raised 55 degrees, the bottom of this truss from the horizontal, you have to add the 12 degrees 43 minutes to the 55 which comes to approximately [128] 67 degrees. That is only with reference to the bottom of the girder or the shape of the underside of the bridge. It is not the 67 degrees—the 67 degrees is not indicative of the elevation of a horizontal line with the roadway of the bridge.

(Moran Exhibit 50 was received in evidence.)

[129]

The Court: There is 12 degrees in there, is that it? The Witness: That's right.

The Court: When this goes up 55 total, it is 67?

The Witness: Right at this point, but as you go out it comes back to the 55 again perhaps two-thirds of the way out.

The Court: I understand.

Q. Mr. Watkins, when you mentioned "right at this point," where you get the additional 12 degrees, would you put a circle around the point and we will letter it so we know what you are referring to? Make the circle in pencil.

The Court: Would it be appropriate to call that point the fulcrum?

The Witness: That point is on the channel side where the bridge rests on the concrete, in other words, the lifeload support. At that point the girder comes out horizontal, and then it takes the flare upwards.

The Court: Just make a mark there, whatever we call it.

Mr. Pohl: Pencil circle, please. That will be sufficient.

[130] (Witness writes.)

- Q. During your attendance at the bridge on May 19, 1972, did you take some photographs? A. Yes, sir.
- Q. I show you a book marked Moran Exhibit 36 for identification. Can you identify the contents of that book? A. Yes, sir.

- Q. What are the contents? A. The contents show pictures of the Tomlinson Bridge in New Haven.
- Q. Incidentally, on whose behalf did you attend the survey of the Tomlinson Bridge? A. Red Star Towing & Transportation Company.
  - Q. Owner of the Devon? A. Owner of the Devon.

The Court: Did you take those pictures? The Witness: Yes, I took them.

[131] \* \*

(Moran Exhibit 36 was received in evidence.)

Q. When you attended the bridge, did you observe the impact point on the girder? A. Yes, I did.

[132]

Q. When you attended the survey of the bridge on May 19, did you attempt to determine where the impact point on the girder was with respect to the fender line if the [133] fenders were there? A. Yes, I did.

[134]

- Q. So we can be clear, the impact point on the girder was plumb on the channel side of where the fender line would be if it had been there? A. That is correct.
- Q. And how far on the channel side? A. Approximately two foot six inches.

The Court: If I understand you correctly, since I am a landlubber, and I want to be sure I do, that means that you concluded that if there had been a fender there the ship would have been bumped into the fender, is that right? Do I miss the point?

What conclusion is to be drawn from what you just said?

The Witness: The vessel at the time of the impact was in the channel. It was two feet six inches, approximately, from the fender rack and in front of the bridge piers.

The Court: From the fender what?

The Witness: Rack.

[135]

Q. Did you specifically examine the fender on the northeast corner? A. Yes, sir.

Q. What was the condition of the fender at the northeast corner? A. The fender rack was badly broken and mostly missing in way of the pier on the northeast corner.

[141]

Q. Can you tell us the width of the fender system on the east side of the draw where it was intact, in other words, how wide was it? A. The width of the fender system from the abutment to the channel side was approximately four feet.

The Court: From the abutment to the channel side?

#### William F. Watkins-for Moran-Cross

The Witness: Yes, the width of the wooden fender system was approximately four feet.

Q. Now, this Old Man chock, do you know its approximate dimensions, the chock on the deck of the Becraft?

A. The canal chock?

Q. You call it the canal chock. What are its approximate dimensions? A. Approximately four feet high by seven feet long.

Q. How close is it to the side of the ship? A. About three and a half inches.

Q. And do you know roughly the distance from the Old Man chock to the bow of the barge?

The Court: To the bow of what?

Mr. Pohl: The bow of the barge. I am talking about the true bow now.

A. From the forward end—I do know the distance.

[142] Q. What is that? A. From the forward end of the clock to the bow is approximately 51 feet.

[143]

Cross-Examination by Mr. Meyer:

[144]

Q. In a previous answer you also stated that you calculated the point of impact and found it to be at least two feet, six inches inside the fender system if a fender system had existed at the time of the collision, is that so? [145]

#### William F. Watkins-for Moran-Cross

A. I stated that the point of impact on the girder was approximately two and a half feet on the channel side of the fender rack on that east side.

Q. So as I understand you, then, you are concluding that had the fender system been in place on May 17, 1972, in its entirety, the chock would still have collided with the underside of the bridge with the side of the barge at least two feet from the outside of the fender system, is that so?

The Witness: If the fender system had been intact, the barge chock would have still struck the girder.

Q. And that did not require the side of the barge to even be in contact with the fender system, is that so? A. That's correct.

[149]

- Q. Was the girder actually torn? A. Yes, it was badly torn and buckled.
  - Q. Was it also deformed? A. Oh, yes.
  - Q. Deflected? A. Yes, it was deflected.
- Q. About how much? A. I would judge about fifteen inches. I presume you mean pushed, deflected bodily in a southerly direction at the point of impact of maybe 18 inches—15 to 18 inches. I couldn't measure that too well.
- Q. Does photograph 11 of Exhibit 36 also show the torn girder as it was pushed about 15 inches off from how it had been before? A. Yes, it does. In other words, before in this photograph the girder would run almost vertical. If you drew a vertical line from the driveworm here vertically up the photograph, that would show how much to the south.

## William F. Watkins-for Moran-Cross

The Court: Even without going to medical school, I can see that is a broken bone.

Q. Mr. Watkins, are there also supporting members between the two girders of the leaf? [150] A. Yes, there are.

Q. Would you describe what you found as to the condition of those supporting members? A. They were buckled, distorted and pulled adrift.

Q. I show you a photograph that has been marked Moran Exhibit 18. Does that depict the damage to the supporting structural members? A. Yes, it does.

Q. May I draw a circle around the one that is fairly obvious (writing). A. That's correct

Q. Thank you.

The Court: What photo is that?
Mr. Waesche: Moran 18. I will offer it as Moran 18.

[157]

Q. Now that you have seen the fender system as it should have been and took a look at the photographs showing that badly damaged steel girder, the deformation of the steel girder, the deformation of the steel girders in between the two, plus the roadbed, do you have an opinion as to what would happen to this [158] particular portion of the fender system which you have marked in red had it been struck by the Becraft? A. Yes, I have an opinion.

Q. What is it? A. It would be hanging there.

William F. Watkins—for Moran—Cross George L. Calain, Jr.—for Moran—Resumed—Cross

The Court: Would be what? The Witness: Hanging.

- Q. Would it have been broken? A. You could have had it split and broken, but the securement to the abutment, the rear whales, would have still been there.
  - Q. Been there but broken? A. Yes.
- Q. Yes? A. They would have been there and broken to see.
  - Q. Yes, but they would have been broken, Mr. Watkins?

The Court: Is that yes or no?

The Witness: Yes, if you hit the-

The Court: Mr. Watkins, this opinion of yours is given on the assumption that the fender system at that point was intact, is that right? We are talking about an intact system, not a system as existed when found it.

The Witness: That is correct. If the barge [159] hit the fender system it would break it, but if it rubbed, it wouldn't and the system is to rub against.

[161]

George L. Calain, Jr., resumed.

Cross Examination by Mr. Waesche (continued):

Q. Captain Calain, on the four or five times that you were in charge of towing the Becraft through the Tomlinson

George L. Calain, Jr .- for Moran-Resumed-Cross

Bridge, had the barge ever contacted the fender system of the bridge? A. No, sir, not to my knowledge.

Q. And you estimated that the opening of the bridge when you went through it on the 17th of May was 65 or 68 degrees, is that correct? A. Somewhere in that neighborhood, yes.

[162] Q. On the four or five other occasions that you proceeded through the bridge, was it also open 65 to 68 degrees? A. There is no way of me telling from the eye. You are only taking a glance at it.

Q. But it seemed to you on the other occasions she was raised about the same height as when you went through on the 17th? A. On or near so.

[166]

Q. And again a picture showing the Becraft coming through the abutments? A. Yes, sir.

Q. And there is an arrow. Is that the king post to which you referred before? A. Yes, sir.

Q. And again the Becraft coming through? A. Yes, sir. [167] Q. Ample clearance between the Becraft and the fender system? A. Yes.

Q. Again the Becraft coming through? A. Yes.

[168]

Q. Captin, were you in charge of the entire flotilla on May 17, 1972? A. I don't follow you as to completely in charge.

Q. You were the one who was directing maneuvers of both tugs, were you not? A. I was the eye, yes, sir.

#### George L. Calain, Jr .- for Moran-Resumed-Cross

Q. And those two tugs had to follow your orders, did they not? A. Supposedly, yes.

The Court: When you say "supposedly," there wasn't any doubt about it, was there?

The Witness: No, sir, except for the difference between the lead tug and the following tug, there is a considerable difference.

The Court: The lead tug has the authority to take action on its own?

The Witness: Yes, sir.

The Court: And the stern tug does not?

The Witness: Yes.

[169]

Q. It was your duty as pilot to see that the tugs and barge were properly lined together through the bridge, isn't that so? A. Yes, sir.

[170]

Q. Would you project from that point the course which the Becraft and the tugs took through the Tomlinson Bridge? A. You want me to draw a line the whole way? [171] Q. Yes, if you would.

## (Witness writes.)

Q. You have done that in red crayon or red pen, have you not, a course line? A. Yes.

Q. Suppose we label it "course line"? A. Near so. It wouldn't be a direct course line.

George L. Calain, Jr .- for Moran-Resumed-Cross

[173]

Q. Weren't you looking ahead? A. Well, you have to look in all directions to make sure that your following unit is doing what it should be doing, as well as your forward unit.

[174]

"Q. When did you next check the port side? A. Well, when I saw that they were getting a little too far, I looked back for the Devon to see, you know, if I could see him anywhere, see what position he might be in, if he could be of any help to me to prevent colliding with the bridge.

"Q. How far through the draw was the Becraft when you saw that she was getting too far to the left? A. She was about a third of the way into the bridge, her starting in."

Do you remember giving that testimony? A. Yes.

Q. Isn't it a fact that the first time you realized that the stern, the tail of the Becraft, was setting too far over to the left was when the barge itself was a third of the way through the draw? [175] A. Yes, sir.

Q. And that is because your attention was directed ahead and not back? A. Yes, sir. You always look ahead.

[176] Q. And from your position amidship you can't see anything except the mast of the Devon, can you? A. That's correct.

Q. How do you know she backed to port? A. I am not at the amidships section of the barge from the time I leave

George L. Calain, Jr.—for Moran—Redirect
William Mazzucco—for State of Connecticut—Direct

the dock—you asked me where I was when I hit the bridge or on this tow and I said I was amidship on the barge. This didn't say I was amidship on the barge when we left the dock or at any other time through the voyage.

[183]

Redirect Examination by Mr. Pohl:

[187]

Q. You heard the testimony by Captain Burns that he noticed a sneer to the right of the leading end of the barge and that he gave his engines a shot ahead, you heard that, sir? A. Yes, sir.

[188] Q. Was that a proper order for him to give? A. Yes, sir.

Q. Is that a proper way to break a sheer? A. Yes, it is.

[192]

William Mazzucco, called as a witness by the State of Connecticut, being first duly sworn, was examined and testified as follows:

Direct Examination by Mr. Waesche:

Q. Mr. Mazzucco, are you presently retired? A. Yes, sir.

Q. On May 17, 1972, what position did you hold? A. Senior drawbridge operator at the Tomlinson Bridge.

[193] Q. Were you on duty during May 17, 1972? A. Yes.

[196]

Mr. Mazzucco, I am going to give you this scale model and I ask you to place it on the chart depicting the position of the tug Diana Moran and the Becraft when they whistled for you to open the bridge. To assist you, this is the Chapel Street Bridge.

The Witness: That is what I am looking for.

Q. About in that position. A. About in that position right there.

The Court: In other words, about halfway emerging from the bridge, the Chapel Street Bridge?

The Witness: I would say—they weren't halfway out because, you see, this is sticking out in the water here. It was approximately—that is about the [197] center, approximately, of the bridge.

Q. Did there come a time when the Becraft struck the bridge? A. Yes.

[198]

Q. Mr. Mazzucco, after you heard the Diana Moran signal for the Tomlinson Bridge to open, will you tell the Court exactly what you did? A. What I did was to answer

the tug back with a foghorn, two blasts of the foghorn, to let the captain of the Moran know that we would be open for him. You don't want me to go into details why?

[200]

The Court: How do you activate the raising of [201] the leaf?

The Witness: The activation is done by the old trolley car system, your Honor, where you have like a crank with a knob on top. That is it. This works through resistors and as you go different notches, it takes less resistance and you have more power.

The Court: It is what they use in subways? The Witness: That's right.

A. After you have done that, then the bridges goes up. When she reaches maximum, then she stops automatically. You don't stop it. It automatically stops by itself.

Q. Do you have any gauge which indicates the angle of elevation at your control? A. Yes, right on the dash of the control.

Q. According to the gauge, what is the elevation when the limit control activates and she stops? A. It is about 65. Normally, when you have an opening for a barge of this sort or any barge or boats coming through, she will go up a degree or two. It is all according to weather, too. For instance, today or yesterday when we had snow, she will go 65 and stop there, because she had snow on it yesterday. Normally on a good day, a clear day, when she is going wide open, she will [202] go maybe a degree or two higher than the 65 degrees.

Q. On this particular occasion, when you raised them for the Becraft on May 17, how high did the leaves go, according to your gauge? A. According to the gauge, what they read was around 67 or something in that neighborhood.

[206]

The Court: Does this mean at 2:02 that afternoon you began moving that handle that you talk about like the old trolley car handle, or does it mean you began the process of all these things you have told us at 2:02?

The Witness: The process, the whole thing, at 2:02.

[207]

Q. If 2:02 is the time that you actually started to raise the leaves and it took you two minutes from the time that you heard the Diana signal to clear the bridge and lower the gates, is it a fact that you heard the Diana at about two o'clock? A. Two o'clock.

Q. When did the barge hit the bridge in time? A. To the best of my recollection, and that is if [208] you are going into seconds, I can't give you that, but I would say 2:04.

The Court: Is it in the log?

The Witness: No, not exactly. It was in that opening between 2:03 and 2:06, so I would say it

hit the bridge exactly approximately about 2:04. That's as close as I could come to it.

[209]

The Witness: The Moran itself. At the angle that the barge was, I made a remark to the fellows, "I think we're going to get hit."

Now I am looking at the rear—trying to see the rear of the barge which is not visible as yet, but as it came along closer, I could see the line, the tow line, in the back, and the barge still wasn't straightening out, and at the angle it was going, it was very obvious he was going to hit. So now I am watching for —of course, I am not doing it because—it was just something personal that I was doing this, watching that rope to see if it would swing over.

In other words, the barge itself was going on an angle this way. If she would swing over and straighten out. But then after a while I noticed that this line [210] here, the line that was from the Devon to the back of the barge, that it kind of slackened down and at the same time I heard like a revving up of a motor. It seemed like the Devon was revving up the motor. But the line became slack.

At that time I made a statement to the fellows, I said, "We are surely going to get hit."

[216]

Cross-Examination by Mr. Pohl:

[226]

Q. Is it possible for you as the operator to raise the bridge leaves to an angle greater than 65 or 67 degrees, using the controls in your control house? A. No, sir.

Q. How long had you been a bridge tender on that bridge? A. I started in '62. Just about ten years.

Q. During that entire ten years, had it been possible to elevate the leaves, using your control, to greater than 65 or 67 degrees? A. I don't understand the question.

Q. Did you ever raise them higher than 65 or 67? A. I said no, sir. No, sir.

Q. Do you know who set the limit switch that would cut off power at that point? A. I believe that would be the electrical department.

Q. And they are-

The Court: Which department?
The Witness: Electrical department.

Q. And that is the electrical department of the State of Connecticut? [227] A. State Highway.

Q. State Highway? A. That is correct.

The Court: The Highway Department operates the bridges?

The Witness: That is right, sir.

### William F. Warm-for Moran-Direct

[231]

WILLIAM F. WARM, called as a witness by Moran, being first duly sworn, was examined and testified as follows:

## Direct Examination by Mr. Pohl:

- Q. Please state your name. A. William F. Warm.
- Q. And your address. A. 59 John Street, New York, New York.
- Q. By whom are you employed? A. Hull and Cargo Surveyors, Inc.
- Q. What is your position? A. I am president and manager.
- Q. How long have you been a marine surveyor? A. In my twenty-second year.
- Q. What types of marine casualties have you surveyed? A. All types of hulls from ships to small craft, and [232] all types of eargo, bridges, tunnels, structures.
- Q. Did you attend a survey of the Tomlinson Bridge on May 24, 1972? A. Yes, sir, I did.

[233]

- Q. I show you a red colored looseleaf folder marked Moran Exhibit 37 for identification, containing some photographs and I ask you if you can identify those. A. Yes, sir. These are the photographs I took at the time of my survey.
- Q. There are two pages of small photographs, is that right? A. That is correct.
  - Q. They are the ones you took? A. That is correct.

# William F. Warm-for Moran-Direct

Q. There is a third page also with a single photograph. Did you take that? A. No, I did not.

[234] Q. Did you obtain that from the State? A. Yes, sir.

Q. Do these photographs fairly represent the conditions that you saw on May 24, 1972? A. Yes, they do.

(Moran Exhibit 37 was received in evidence.)

[235]

Q. Do those photographs correctly represent the condition of the fenders as you saw them on May 24 on the northeast corner? A. Yes, they do.

Q. You said you examined them. Did you actually climb down? A. Yes, I did. There is a ladder, metal ladder, that and walked around on them to see as much as I could.

Q. What was the condition? A. The timber in the fender system was generally rotted, a lot of checks, breaks. The ends of the breaks had marine growth on them indicating they had been there over some period of time. It was in very poor condition.

[237]

Q. What is the purpose of a fender system at a bridge, Captain Warm? A. Well, to provide a safety factor for vessels passing through the opening of the bridge to keep the vessel clear of the bridge structure.

# William F. Warm-for Moran-Cross

The Court: Clear of the bridge what? The Witness: Bridge structure.

[245]

Q. Did you also survey the hull of the Becraft? A. Yes, 1 did.

Q. I believe you said you surveyed the true starboard side. Was that correct? A. That's correct.

Q. That was the port side of the barge as it was being towed. Can you tell us what you found? A. In an area close to midships we found a series of very deep gouges and indents ranging from two to four above the water line.

[246]

Q. Did you form an opinion as to what type of surface the plates had contacted to cause those conditions? A. It had to be a very rough, hard surface, something like rock.

[249]

Cross-Examination by Mr. Meyer:

[261] Q. You were of the opinion because of what you saw and which is described in this photograph that the damage or at least the contact that the barge had had to be some hard substance, is that correct? A. That is correct.

Q. And what led you to determine that by reason of what you saw? A. The area of impact was deeply gouged, just as if you had taken your—as an example—your fingers

# William F. Warm-for Moran-Cross

and raked them through snow, you would see the gouges along the line of impact.

Q. Were they deep gouges? A. Quite definitely evidence as gouges.

Q. How long were they from fore to aft? A. Oh, they ran anywhere in the neighborhood of, as I recall, several feet, probably three, four, five feet.

[262]

Q. Yes. How far above the bottom of the barge is that lower gouge located? A. I would estimate about two to three feet.

Q. And how high is that gouge or series of gouges? A. Over a foot.

[267]

Cross-Examination by Mr. Waesche:

Q. Captain Warm, at the conclusion of your [268] investigation and survey of the Tomlinson Bridge, did you conclude that the chock would have contacted the girder regardless of the fender system? A. I think the fender would have materially contributed toward keeping the Becaft away from the bridge.

Q. That wasn't my question. My question was, did you conclude that the chock would have contacted the girder regardless of the fender system? A. I formed no conclusion relative to that, counselor.

Q. Did you form any opinion? A. Yes. In my opinion, the existence of a proper fender system might possibly have helped keep the chock away from the bridge.

# William F. Warm-for Moran-Cross

- Q. Did you write a report at the conclusion of your survey of the bridge? A. Yes, sir, I did.
  - Q. Is this your report? A. Yes, sir, it is.
  - Q. May I read part of it to you.

[269]

Q. "It was noted that the north and center section of the timber fender system were broken out and in places missing. Because of the limited clearance of the span, these fenders lie just outside the face of the bridge and provide only a fender surface between a vessel and the bridge. It appears that the contact with the bridge span may have occurred regardless because of the very high freeboard of the barge. This will be further confirmed."

Is that your statement? A. That is correct, in the report.

Q. So was it your opinion that the chock would have contacted the span regardless of the condition of the tender? A. At that time it was.

[272]

Mr. Pohl: I would also offer in evidence at this time a document marked Moran Exhibit 13 for identification, which was a report signed by Mr. Fijol and marked as Exhibit 1 on his deposition. It is now Moran Exhibit 13.

(Moran Exhibit 13 was received in evidence.)

Mr. Pohl: Mr. Fijol, on his deposition, three other documents were marked as Fijol Exhibits 2, 3 and 4. Those documents are included in a document I shall

now offer, Moran Exhibit 17 for identification, which is a stipulation between Mr. Waesche and myself as to what constitutes the permit for the bridge and the plans referred to in that permit.

[273]

(Moran Exhibit 17 was received in evidence.)

Lawrence A. Beaudin, called as a witness by Moran, being first duly sworn, was examined and testified as follows:

# Direct Examination by Mr. Pohl:

Q. What is your address, Mr. Beaudin? A. 108-58 South Fairfield, Chicago, Illinois.

Q. Are you presently retired? A. Yes.

Q. What work were you involved in during the course of your professional life? A. Civil engineer.

Q. By whom were you employed in that capacity? A. Corps of Engineers.

Q. That is the United States Army? A. U.S. Army Corps of Engineers.

Q. For how long were you employed by them? A. Forty-three years.

Q. From when until when? A. From 1928 to mandatory retirement in 1971.

[274] Q. Generally, what did your work with the Corps of Engineers involve? A. It involved the operation, construction, maintenance of water-oriented facilities, such as locks or dams, rivers, dredging, breakwaters and similar objects.

- Q. Where did you perform your services with the Corps of Engineers? A. The first eleven years was with the Chicago district, and the next eight years was in the Cincinnati district on the Ohio River, and the next eighteen years was back in the Chicago district, and six years in the north central division.
- Q. Puring this time, did your duties involve passing on applications to build bridges? A. Yes, sir.
  - Q. Over navigable waters? A. Yes.
- Q. In eighteen years in the Chicago district, what was your position there? A. Chief of the operations division.
- [275] Q. During this time, did you have to pass on these applications to build bridges? A. Yes, sir.
- Q. Was any particular statute involved in connection with these applications to build bridges? A. Yes, sir.
- Q. What? A. It was Section 9 of the River and Harbor Act of 31 March, 1899.
  - Q. Are you familiar with that Act? A. Yes, sir.
- Q. Does that Act apply to bridges such as the Tomlinson Bridge, which is constructed wholly within a State? A. Yes, sir.

[276]

- Q During your professional career with the Army Engineers, did you have occasion to pass on the plans for the application to build bridges? A. Yes, sir.
- Q. Approximately how many bridges did you have to pass on the application for? A. About 35 bridges.
- Q. And what type of bridges? A. They were all types. They were fixed, bascule, double leaf bascule, single leaf bascule, swing bridges and fixed bridges.

Q. When an application wished to build a bridge, what was the procedure he followed? A. He submitted his application, we would review it, call for a public hearing, which provided all interested parties to express their views to the adequacy of the dimensions, and after these points were resolved the application, with recommendations, was forwarded through [277] channels to the Chief of Engineers and the Secretary of the Army.

Q. What type of plans was the applicant required to submit? A. The general plan was principally the horizontal and vertical clearances that would affect navigation.

Q. I show you Moran Exhibit 17 and under the cover sheet is a document entitled "Approval of location and plans of bridges."

Have you examined that! A. Yes.

Q. I now show you three other documents attached to Moran Exhibit 17, and I ask you if you have examined them. A. Yes.

Q. I invite your attention to the fact that counsel has stipulated that these three other documents are the "attached plans" which are referred to in the permit for construction of the bridge. A. Yes.

Q. Do those plans or any of them indicate the horizontal clearance available to navigation for vessels passing through the draw of the Tomlinson Bridge? A. Yes.

[278] Q. Which document indicates that? A. The first one, "Title: Tomlinson Bridge over the Quinnipiac River, Forbes Avenue, New Haven, Connecticut, location and general plans."

The Court: When you are talking about horizontal clearance, what do you mean?

The Witness: That would be normal to the channel, the sailing line, and the horizontal clearance would be the water variable between piers, supporting piers.

[279] The Court: Again, do we have any problem with horizontal clearance? There is no doubt there was horizontal clearance.

Mr. Pohl: The horizontal clearance is supposed to extend to the sky.

The Court: Does that have anything to do with leaves?

Mr. Pohl: The elevation.

The Court: Let's get to the elevation.

Mr. Waesche: We are prepared to stipulate a lot of this.

The Court: I think you could too.

What is it you are trying to tell me, Mr. Beaudin, by pointing to the leaves there?

The Witness: These leaves provide 126 feet.

The Court: When they are in that position?

The Witness: When they are in that position.

The Court: The condition shown is for all purposes right angles or close to it?

The Witness: It is measured on the deck of the bridge, that is this line here, and that represents an angle of 82 degrees measured by a protractor. With the leaf in that position there is complete vertical clearance above [280] the face of the fenders all the way up, unlimited.

The Court: You don't even need to be an engineer to see that.

The Witness: Simple.

The Court: That doesn't mean that with the leaves not at such a substantial angle that there wouldn't also be some clearance, does it?

The Witness: No, but it wouldn't— The Court: It wouldn't be as much.

The Witness: This is what was authorized.

The Court: Right.

Q. Let me make sure we understand.

The plans indicate that when the leaves were raised no part of the leaf is to overhang the water, is that right, sir?

A. That is correct.

[281]

Mr. Waesche: Those diagrams show the leaves going up to 82 degrees.

The Court: He stated that is what was authorized. Mr. Waesche: That is on the plans, for sure.

The Court: I will take his testimony it was authorized and see whether I agree with him or not.

Q. I show you a paper which is marked Moran Exhibit 35 for identification. Can you identify that? A. This is a sketch that was drawn from dimensions shown in scale from the copy of the plans that we just looked at and it shows in an enlarged scale one inch equal to [282] twenty feet the bascule leaves in three positions, one in the down

position and in the position as shown on the authorizing document, and another position shown at 67 degrees between the deck of the bridge and the horizontal.

Q. Thank you, sir.

Mr. Pohl: Would your Honor care to look at this sketch the witness has drawn? It really shows the effect of elevating the leaves only a 67 degree angle between the deck of the bridge and the horizontal.

The Court: Right, I understand.

Q. With the leaves raised so that there is a 67 degree angle between the deck of the roadway and the true horizontal, how much of the leaf hangs over the water? A. Nineteen feet on each side.

[283] Mr. Waesche: There I am going to object unless this witness is aware of the width of the fender system along the abutment at the time of the accident.

The Court: I think the best way to avoid dispute is for him to show us what he means by what he is saying.

Come up here.

If you will point out what you mean by 19 feet.

The Witness: I am referring to the authorized document only.

The Court: Let's take a look at the authorized document or that sketch, if it is a copy of it.

The Witness: The sketch will show this vertical clearance or the horizontal clearance in here is at the channelward face of the fender.

The Court: You mean when it is at 82 degrees? The Witness: Yes.

The Court: And when it is lowered to 67?

The Witness: Measuring from the same base line over to this line is 19 feet.

Mr. Waesche: All right.

[284]

(Moran Exhibit 35 was received in evidence.)

Q. I show you another document, Moran Exhibit 35A for identification. Did you prepare that? A. Yes.

Q. And what is that, sir? A. This shows what has been shown on the previous exhibit with another one added.

Q. What is the other elevation of the bridge which has been added? A. One showing the degree—raising the bridge to 55 degrees between the deck and the horizontal.

Q. And when the bridge is raised to a 55 degree angle between the deck and the horizontal, what is the overhang of the top of the leaf over the water, measured from the same base line? A. Approximately 31½ feet on each side.

Q. So what does that leave as the unlimited vertical clearance? A. Sixty-three feet as scaled. I didn't compute this.

Q. And the permit pursuant to which the bridge was built required what? [285] A. 126 feet.

(Moran Exhibit 35A was received in evidence.)

Q. I ask you to assume that the leaf which was struck by the chock was elevated to an angle of 67 degrees with the horizontal and that only the upper six inches of the chock engaged the girder.

Can you calculate how far the barge would have had to move to the right for the chock to pass clear underneath the girder? A. Yes.

Mr. Waesche: To the right of what?

Mr. Pohl: In the channel. We have a leaf, sir. [286] The chock engaged it. If that whole barge had been moved to the right or to the west at some point that chock would have gone underneath the leaf, it wouldn't have touched anything.

I am merely trying to show how far the barge would have had to move to the right.

[287]

Mr. Pohl: I am asking the witness to assume at the point where we hit that girder, right at that point the angle of elevation of girder and the horizontal was 67 degrees. It might be, for example, if this were raised like that, it might be right at that point there.

The Court: All right, it might be anywhere.

Mr. Pohl: At the point where we touched that girder, there was a 67 degree angle with the horizontal. How far did that barge have to move to the right for that chock to slide right underneath?

Lawrence A. Beaudin—for Moran—Direct Charles Edward Quarry—for Devon—Direct

[288] The Witness: My figures by trigonometry, it is two and a half inches.

Q. You have drawn a sketch showing how you figured that and you have drawn your formula, is that right? A. Yes.

Mr. Pohl: May I have this marked for identification?

The Court: Yes.

(Moran Exhibit 54 was marked for identification.)

(Moran Exhibit 54 was received in evidence.)

Q. Mr. Beaudin, what is the purpose of a fender system on a bridge? A. To protect the bridge structure, the pier, the abutment and navigation.

[291]

CHARLES EDWARD QUARRY, called as a witness by Devon, being first duly sworn, was examined and testified as follows:

Direct Examination by Mr. Meyer:

[295]

Q. Have you assisted any barges through the Tomlinson Bridge other than the Becraft? A. Yes, I have.

# Charles Edward Quarry-for Devon-Direct

Q. Similar size to the Becraft? A. Close to it, yes.

[300]

Q. Was there any contact with the fender on either side of the Chapel Street Bridge? A. There was not.

Q. What is the horizontal clearance of that draw? A. 71 or 72 feet. I don't recall it offhand.

[301]

Q. Did you receive any instructions from Captain Calain prior to the Becraft executing that turn? A. I received an astern order in the course of executing that turn, yes.

Q. And did you undertake to go astern? A. Of course. [302] Q. How long did you maintain that astern engine movement? A. It was a short period of time. A minute or less.

Q. And then what happened? A. That was the last order that I received.

Q. Did you get an order from Captain Calain to stop?
A. Of course, yes.

Q. Did you acknowledge that order to Captain Calain? A. Yes, I did.

Q. And did you stop your engines? A. Yes, I did.

[326]

Q. Captain Quarry, how often prior to May 17, 1972, had you towed or assisted in towing the Becraft in light [327] condition through the Tomlinson Street Bridge? A. Many times. I don't know the exact number of times.

# Charles Edward Quarry—for Devon—Direct

Q. Isn't it a fact— A. It is a matter of record, but I didn't look it up.

Q. Isn't it a matter of record that the Becraft had been proceeding from Atlantic Cement dock in the Mill River through the Tomlinson Bridge for about two years prior to the accident? A. Yes, I would say it is approximately two years.

Q. And she made trips through about twice a month?

A. Approximately, yes.

Q. On any of the prior times that you have taken the Becraft, either assisting or towing, through the Tomlinson Bridge before May 17, 1972, have you had any trouble? A. No.

Q. Barge ever touch or collide with the bridge? A. No, that is the first collision.

[330]

Q. When you are coming along and making that 90 degree turn to go under the Highway Bridge and align yourself to go under the Tomlinson Bridge and the pilot gives you an order to go half astern, what is the purpose of that order? A. Well, one purpose would be to reduce the headway, another purpose would be to decrease the momentum of the turn.

Q. In other words, one purpose of that order is to decrease the swing of the stern of the barge as it is being—A. The rapidity of it.

Q. Yes, to the left. A. Yes.

. . .

# Charles Edward Quarry-for Devon-Direct

[331] Q. Less than a minute. Now, when you received the stop order, was the stern of the barge still swinging to the left? A. Yes, sir, it was.

Q. So that you hadn't been able to go astern long enough in point of time to arrest the swing on this occasion, had you? A. That's correct.

Q. And, as a matter of fact, even after the stop order that stern kept swinging to the left up until the time of impact? A. That's correct.

Q. What was about the angle of elevation of the leaves of the bridge when you went through on May 17? A. I estimated at about 65, 70 degrees.

Q. For the two years that you had gone through this bridge with the Becraft on prior occasions, what were the leaves of the bridge open to? A. About the same. There was nothing unusual about the bridge leaves.

Q. Tell me, do any large ships, ocean-going ships, go through that bridge? A. No, no large ones. We used to bring ocean-going big ships through there before I-95, but not since then.

[332] Q. So that— A. I have had a couple of small ones. There are ocean-going ships but they are no bigger than the barge.

Q. No high mast? A. They had high masts.

Q. How high? A. I would say the masts were probably 35, 40 feet. We dropped the top mast down on the ship.

# UNITED STATES DISTRICT COURT

Southern District of New York

72 Civ. 4633

In the Matter

of

The Complaint of Tug Helen B. Moran, Inc., as owner and Moran Towing & Transportation Co., Inc. as chartered owner of the tug Diana L. Moran, for exoneration from or Limitation of Liability.

In the Matter

of

The Complaint of Tug Devon, Inc., Plaintiff, as owner of the tug Devon, for exoneration from or Limitation of Liability.

LASKER, D.J.

On May 17, 1972, the unpowered barge Becraft, which was being towed by the tug Diana L. Moran and assisted by the tug Devon, struck the Tomlinson Bridge on the Quinnipiac River near New Haven, Connecticut, causing damage to the barge and the bridge. A trial was held in these consolidated actions to determine the respective liabilities of the parties involved in the accident.

I.

#### The Uncontested Events

The tug Moran proceeded on the day of the accident to the Atlantic Cement Company dock on the Mill River at New Haven to take the barge Becraft in tow for a voyage to Ravenna, New York. The Becraft was being towed stern first and the Moran was made fast to the Becraft's stern. During the trip, the captain of the Moran, George Calain, Jr., was positioned aboard the Becraft to act as pilot in charge of the operation and was in radio communication with the crews of the Moran and the Devon, which was positioned to the rear of the barge to act as a rudder in assisting the flotilla.

The flotilla headed down the Mil' River toward the junction of the Mill and Quinnipiac Rivers where it was necessary to turn approximately 90° to the right into the Quinnipiac River so that the ships could pass through the Tomlinson Bridge.

The Tomlinson Bridge is of bascule type construction, with leaves that elevate to allow ships to pass. The Becraft entered the draw favoring the left side to insure that a kingpost on the starboard side of the barge would clear the overhanging bridge leaf on the right side of the draw. However, the barge slid too far to port and the port side of the barge rubbed the granite abutment of the bridge, damaging both the bridge and the barge. After this collision, the Becraft was deflected off the abutment and shortly thereafter a chock on the barge snagged the girder of one

of the raised bascule leaves, resulting in substantial damage to the leaf.

#### II.

# Contentions of the Parties

The Tug Helen B. Moran, Inc., as owner, and Moran Towing and Transportation Co., Inc. as bareboat charterer of the Moran, and the Tug Devon, Inc., as owner of the Devon, seek exoneration from or limitation of liability for the damages sustained by the State of Connecticut, as owner and operator of the Tomlinson Bridge. Connecticut filed claims in and answer to both proceedings.

The tug Moran asserts that:

- (1) The State of Connecticut is solely responsible for the damage caused by the barge's collision with the abutment because the fender system covering the abutment was missing and unrepaired.
- (2) The State of Connecticut is solely liable for the damages caused when the chock snagged the girder of the Tomlinson Bridge because the bridge unlawfully deviates from its construction plans as approved by the Secretary of the Army and presents an illegal obstruction to navigation.
- (3) The faults in the bridge structure proximately caused the accidents.
- (4) The Devon partially caused the second collision, between the barge's chock and the girder of the bridge,

by reversing its engines wrongfully and without orders from the pilot of the Moran. This reversal of engines, which is claimed to have occurred immediately after the barge hit the bridge abutment, is said to have caused the barge to swing to the left under the leaf of the bridge, and to hit the bridge's leaf.

The State of Connecticut contends:

- (1) The Moran Towing & Transportation Co., Inc., as employer and bareboat charterer of the tug Moran, is liable for the damage to the bridge because (a) the flotilla was proceeding at an excessive rate of speed; and (b) the captain of the Moran negligently handled the flotilla's passage through the bridge.
- (2) The tug Devon is liable for failing to warn the Moran pilot that the flotilla was improperly aligned for the passage.
- (3) The state should not be held liable for any negligence on its part either in failing to maintain the fender system in proper condition or in the construction of the bridge because such negligence, if any, was passive and not the proximate cause of the accidents.

The Devox denies that it was negligent in any respect.

#### III.

#### FINDINGS OF FACT

#### First Collision

The flotilla entered the draw of the Tomlinson Bridge favoring the east or left side. When approximately one-

third of the Becraft was in the draw, the pilot of the Moran, Calain, observed that the after end of the barge was sliding too far to port and that as a result the barge was proceeding at a slant. (33, 173-75)<sup>3</sup> Shortly thereafter, the port side of the barge rubbed what existed of the timber fender system on the northeast abutment of the bridge, causing damage to the steel hull of the Becraft.

The bridge abutments on either side of the channel are constructed of granite and designed to include a wooden fender system outside the stone fencing. The fenders are:

"... both for the protection of the bridge and for the protection of the water-borne commerce." Complaint of Wasson, 495 F.2d 571, 578 (7th Cir. 1974), cert. denied, 419 U.S. 844 (1975).

For at least two months prior to the date of the accident the fender system on the northeast abutment was in a broken and deteriorated condition, leaving the abutment unprotected.<sup>2</sup>

A. Negligent Maneuvering on the Part of the MORAN without a proper lookout

Captain Calain testified that on prior transits the barge had not contacted the fender system. There is no real dis-

<sup>&</sup>lt;sup>1</sup> Except where otherwise noted, numbers in parentheses refer to pages of transcript of trial.

The State of Connecticut does not dispute these facts. The State argues, however, that the missing fender system was not the proximate cause of the damage to the Becraft's hull, but that the state of the fender system was merely a passive condition and the cause was the negligent maneuvering of the flotilla, without proper lookouts and at an excess rate of speed.

pute that the barge entered the Tomlinson Bridge draw not in the middle of the channel, but favoring the left of the passage. Moran admits that the after end of the barge swung farther to port than was intended. (Moran post-trial memorandum, p. 20) Calain tended that he was pre-occupied with the clearance of the chock under the bridge leaf. (66, 67) As a result, Calain was unaware of the danger the slant of the flotilla presented until the barge was one-third of the way through the bridge draw. (174-75)

During the transit, Calain stood on the starboard of the barge, at approximately midships. (26) Although he did move about the barge somewhat, his visibility at any particular time was necessarily limited because the Becraft is 290 feet long. Moreover, despite the fact that he testified that the pilot in charge of a flotilla should look "in all directions" (173), his attention was directed only ahead of him. (175) The fact that Calain did not observe the stern end of the flotilla might not have been of consequence if he had directed his crew to keep a lookout, but such an order was not given. A deckhand from the Moran had boarded the Becraft at the Atlantic Cement pier (14, 24) but had no assigned duties to perform while the flotilla was proceeding through the Tomlinson Bridge draw. (66) In view of Calain's limited scope of visibility, the deckhand should have been assigned as a lookout.

We find that the swerve of the flotilla to the left was a proximate cause of the collision with the fender system and granite abutment. We also find that the failure to perceive the danger and to avert the accidents was proximately caused by Calain's failure to observe the swing of

the barge in time to arrest it and to post another lookout who could have seen the condition.

## B. Excessive Speed

The tug captains of the MORAN, DEVON and Calain all testified that the speed of the flotilla when entering the draw was approximately 11/2 to 2 knots, the speed maintained on prior occasions (Calain 33; Burns 94-95; Quarry 316). Mazzucco, the bridge tender, testified that he thought the flotilla was going unusually fast. Mazzucco's log recorded the Moran's signal to enter the draw at 2:00 P.M., the time the bridge was raised at 2:02, and the collision between the chock and the bridge leaf at 2:04. From these times and the distances necessary to travel from the point at which the Moran signaled to the point at which the collision occurred, the State calculates that the flotilla must have proceeded at 5 knots. We do not find the log's recordings to be conclusive, however. The State admits that the times recorded for the blowing of the two blasts and the time of the collision "are not precise." (State's post-trial memorandum, p. 8) Moreover, the Moran's log shows that the operation started at 1:50 P.M. and the collision occurred at 2:05. There is thus a significant variance between the Moran's log and that of the bridge tender. (Moran Ex. 1) On the basis of the Moran's figures, the flotilla would have been proceeding at a speed of about 2 knots. In view of the discrepancy between the logs, the admission that the bridge tender's notations are not precise, and the unanimous testimony of the tug captains that the flotilla was not traveling at any excessive rate of speed, we find that the preponderance of the evidence

establishes that the flotilla was not traveling at an excessive rate of speed.

## C. Negligence of the State

Regardless of negligence on the part of the Moran or Devon, the State is accountable for its failure to maintain the fender system properly. Had the system been in good condition, the barge would not have contacted the granite abutment and would not have sustained the damage to its hull. Accordingly, we find the failure to maintain the fender system in proper condition to be a proximate cause of the damage.

### D. Liability of the DEVON

Although Moran does not charge the Devon with responsibility for the barge's contact with the fender system, the State of Connecticut contends that the Devon should be held partially liable for both accidents because the master of the Devon failed to warn the Moran pilot that the flotilla was not properly aligned for passage through the Tomlinson Bridge.

The evidence fails to establish such negligence. Charles Quarry, master of the Devon, testified that at the start of the voyage all that he could see in front of him while standing in the Devon's pilot house was the "big red bow" of the Becraft, its deck and the sky. (298) As the flotilla started, the Devon backed off several feet (300) but not enough to enlarge the area of Quarry's visibility. As the flotilla began its approach to the Tomlinson Bridge, the Devon was "directly behind the barge, right head-on." (302)

Even as the barge, and then the tug, angled into the draw, Quarry's vision was limited; he testified that he could not see the chock on the barge and did not know the specific nature of the second collision. Under these circumstances, Quarry cannot be deemed negligent for faling to warn the Moran pilot about a condition that he could not see.

#### IV.

#### FINDINGS OF FACT

#### Second Collision

After contacting the fender and abutment, the Becraft was deflected starboard into the channel. However, shortly thereafter the four foot chock on the barge's port side collided into a girder on one of the overhanging bridge leaves, damaging the bridge and the barge.

Moran contends that the State is liable for the damage because the bridge leaves were not elevated to the angle required in the bridge's permit and that the Devon is liable for backing astern after the contact with the fender system and without orders from the Moran pilot.

# A. The Bridge

The Tomlinson Bridge was built pursuant to a permit granted in 1922 by the United States Army Corps of Engineers, as required by the Rivers and Harbors Act of 1899 (33 U.S.C. §401). The bridge was completed in 1925.

The approved plans specified the expected width of the water between the bridge abutments to be 126 feet and

required that no part of the leaves when elevated extend over the water. To achieve this requirement the leaves must be capable of raising to an angle of 82 degrees above horizontal.

As constructed, however, the bridge is incapable of elevating to an 82 degree angle and, since its completion, the State concedes that the leaves have only been elevated to an angle of approximately 65 degrees.<sup>3</sup>

### B. The BECRAFT

The Becraft is 290 feet in length, and 55 feet in beam. The horizontal clearance between the Tomlinson Bridge abutments is about 126 feet, or 71 feet wider than the width of the barge. When the leaves open to an angle of 65–67 degrees, they extend nineteen feet over the water on each side, leaving an unobstructed clearance of 88 feet. Immediately prior to entering the Tomlinson Bridge draw, the flotilla had passed without incident through the Chapel Street Bridge draw where horizontal clearance was 71 or

<sup>&</sup>lt;sup>3</sup> Although the Moran contends that the leaves in fact were only elevated to an angle of 55-58 degrees, Captain Calain testified that the bridge was elevated about 65 degrees (161). This discrepancy is in actuality a matter of mathematics rather than of the actual elevation of the leaves. One of Moran's surveyors, Watkins, measured the angle of elevation of the outer surface of the damaged leaf as between 55 and 58 degrees. (124) He testified that the inner surface of the leaf's girder closest to the water angles approximately 12½ degrees even when in a horizontal position and that the angle must be added to whatever angle of elevation the leaf attains. Thus, the sum of these figures equals the elevation of the leaf at the point the chock contacted it. (127, 128, 132, 147-48) Moran's other surveyor, Halboth, measured the leaf elevation on May 19, 1972 as approximately 65 degrees (State Ex. J., p. 2).

72 feet (25,300). More—— th Quarry and Calain testified that the Becraft had clear! the Tomlinson Bridge on numerous occasions during the two years preceding the accident when the leaves had been elevated to the same angle as on the day of the collision. (161, 162, 331) Whatever hazards the leaves presented were clearly known to Calain.

Furthermore, as found above, the Moran pilot maneuvered the flotilla into the draw favoring the left, and due to inadequate attention to the barge's position, the danger of the slant was not noticed in time to avert the collision with the granite abutment. It is reasonable to conclude that the barge's chock would not have snagged the bridge leaf had the Becraft not been on the left side of the draw. Thus, the same negligent maneuvering that caused the collision with the fender system and the granite abutment also caused the collision between the chock and the bridge leaf. There is no reason to believe that if the barge had been in the center of the draw, it would not have passed through safely as it had on prior occasions.

# C. The Effect of the Contact with the Fender System

Calain testified that had the fender system been in proper repair, the Becraft would have deflected further into the channel before striking it; that is, the barge would have been positioned more toward the center of the passage, and the chock would not have struck the bridge girder. (49) However, two witnesses employed by Moran, Watkins and Warm, testified to the contrary. (145, 169) We find that the preponderance of the evidence is that any added deflec-

tion of the barge that would have resulted from a proper fender system would not have prevented the collision between the chock and the girder.

Calain also testified that after the Becraft hit the fender system and the abutment, he estimated that the barge would clear the bridge leaf without difficulty. (36-37, 45) Only the upper five to six inches of the chock engaged the girder. If the barge had been only three inches further to the right in the channel, the contact would not have occurred. (287-88; Moran Ex. 54) Had Calain realized that only a slight movement to the right would have prevented the accident, he could have taken steps to achieve this. No such steps or orders to take any such steps were given.

In sum, the evidence established that although Calain understood the angle of the leaf, he miscalculated the positioning of the barge and did not execute orders necessary to avoid the collision.

# D. The Alleged Liability of the DEVON

The Moran asserts that after the Becraft contacted the fender system and the granite abutment of the bridge, the barge, which deflected to the right into the channel, would have cleared the passage under the bridge leaf if the Devon had not wrongfully and without orders reversed engines, pulling the after end of the Becraft to the left and under the raised by until the chock caught the girder. The captain of the Devon, Quarry, denies reversing engines without orders. (310, 315)

The Moran pilot, Calain, testified that after the barge contacted the fender system he saw a puff of smoke directly

behind the Becraft and in line with the mast of the Devon. (72) The Moran contends that this smoke was caused by the Devon backing her engines full astern.

At the time Calain allegedly saw the mysterious smoke, however, he did not assume that the Devon was backing and made no attempt to contact the tug by walkie-talkie to order her to stop or to ask the cause of the smoke. (73) Calain admitted that because he could see nothing of the Devon but her mast, he had no way of knowing what had happened and that although the smoke could have been caused by the Devon's going forward and not astern, he assumed that the tug went astern because the Becraft began to deflect to the left and towards the bridge. (73)

Calain's testimony is insufficient to establish that the Devon negligently backed astern without orders. To begin with, Calain's view of the Devon was so obstructed that he could not tell the tug's movements. Secondly, there is a serious dispute as to what effect the Devon's backing-if she backed-would have had on the Becraft's movements. Calain testified that the effect of the Devon's backing full astern would be to back to port. (28-29, 63) Quarry denied that the Devon would do so with a two knot headway. (314) In addition, the Devon contends that it was positioned to the Becraft's starboard and that even if the tug had backed astern, the backing could not have caused the Becraft to deflect to the left. The Moran disagrees and argues that the Devon was directly behind the Becraft. The testimony of Mazzucco, the bridge tender, and those aboard the Devon that there was strain on the tug's port line supports the contention that the Devon was angled to the Becraft's

starboard. (210, 212, 303, 348, 369-70) Calain testified, however, that he saw the puff of smoke on the center line of the barge. (38) An indentation in the center line of the Becraft's plating, if made on the day of the accident, would have been caused by the Devon's striking the plate head-on and supports the Moran's theory. Neither the contention of the Moran nor of the Devon as to the Devon's position is supported by clear-cut evidence.

There is another, and more plausable, explanation for the Becraft's movements. The mate of the Moran, Burns, who was the officer in charge of the Moran during the passage, testified that he doubled the speed of the Moran without specific instructions from Calain after the barge hit the fender system and before it contacted the bridge leaf. (82, 96) At the time the forward end of the Becraft was being towed in a westerly direction, or to the right, and the sudden increase in speed could have caused the after end of the Becraft to swerve toward the east, or left, into the bridge. Thus, even if the Becraft might otherwise have avoided contacting the bridge leaf, the Moran's increase in speed could have drawn the barge further to port and under the leaf.

In view of Calain's limited vision of the Devon, his failure to check at the time as to whether the Devon had backed astern, the serious dispute as to the effect any backing would have, and the Moran's own movements, we find that the evidence does not support the conclusion that the

Immediately after the Moran increased her speed, her port gate line broke (97-98), indicating that there was more strain on the port line and that the barge was being pulled to the right.

Devon wrongfully backed astern, and that the Becraft's deflection to the left was caused not by any action on the part of the Devon but by the Moran's increasing speed following the contact with the fender system. In conclusion, the general failure of the Moran's captain to keep the flotilla angled properly through the draw and to take steps to have the barge pulled to center after the first collision, as well as the acceleration of the Moran after the first impact caused the barge to pass under the bridge leaf and the chock to strike the girder.

#### V.

#### CONCLUSIONS OF LAW

#### A. First Collision

Fender systems which surround a bridge abutment are designed to cushion collision of boats with bridges that cannot altogether be avoided. Complaint of Wasson, supra, 495 F.2d at 579. However, the collision itself was caused not by the defects of the fender system but by the failure of the pilot to see the danger of the barge's position or to post a proper lookout who could have seen the danger in time to act to prevent the accident.

According to Article 29 of the Inland Rules of the Road (33 U.S.C. §221):

"Nothing . . . shall exonerate any vessel, or the owner or master or crew thereof from the consequences of any neglect . . . to keep a proper lookout."

As stated above, Captain Calain, the pilot in charge of the flotilla's movements, did not adequately keep note of the barge's position. The court in United States v. Holland, 151 F. Supp. 722, 777 (D. Md. 1957) noted that, where, as here, the pilot has additional responsibilities, he cannot alone be a proper lookout. In any event, a lookout must be stationed at the proper place where the risk of danger may be most readily perceived. See Compania Maritima S.A. v. Moran Towing & Transportation Co., 197 F.2d 607, 609-10 (2d Cir. 1952). No such lookout was stationed on board the Becraft. The failure timely to observe a dangerous condition and to take means to correct the condition constitute acts of negligence. Chitty v. M.U. Valley Voyager, 284 F. Supp. 297 (E.D. La. 1968), aff'd, 408 F.2d 1314 (5th Cir. 1969).

The Moran's departure from its statutory obligation to post a proper lookout not only constitutes negligence but triggers application of *The Pennsylvania* doctrine:

"that when the fault consists in the breach of a 'statutory rule intended to prevent collisions . . . the burden rests upon the ship of showing, not merely that her fault might not have been one of the causes, or that it probably was not, but that it could not have been." Merritt-Chapman & Scott Corp. v. Cornell Steamship Co., 265 F.2d 537, 539 (2d Cir. 1959) (L. Hand), quoting from The Pennsylvania, 86 U.S. 125, 136 (1874).

But although the Moran pilot was negligent, this negligence does not exonerate the State of Connecticut from liability for the damage caused by the first co. ision. Al-

lowing a condition such as the disrepair and absence of a fender system to exist was a material fault on the part of the State. Complaint of Wasson, supra, 495 F.2d at 578-80. The State's failure to maintain the fenders in good repair was also in disregard of the bridge plans approved by the War Department, and constituted a violation of §9 of the Rivers and Harbors Act (33 U.S.C. §401). The State's violation of the statute renders The Pennsylvania rule applicable to it as well as to Moran. Complaint of Wasson, supra, 495 F.2d at 579-80. In a case such as this where both parties have violated a duty, damages are apportioned equally. Merritt-Chapman & Scott Corp. v. Cornell Steamship Co., supra; accord, Board of Commissioner of Port of New Orleans v. M.V. Agilos Michael, 390 F. Supp. 1012, 1016 (E.D. La. 1974).

## B. Second Collision

The discrepancy between the approved plans for the bridge which specified that the leaves be elevated to an angle of 82 degrees and the bridge's actual capability of rising to only 65 degrees violates §9 of the Rivers and Harbors Act (33 U.S.C. §401) which provides:

"... it shall not be lawful to deviate from such plans either before or after completion of the structure unless the modification of said plans has previously been submitted to and received approval of the Chief of the Engineers and of the Secretary of the Army."

It is conceded that the State obtained no authorization modifying the plans.

However, unlike the rotted fender system, Captain Calain had actual knowledge of the limited elevation of the bridge leaves (22-3, 27, 101, 102) and knew or should have known of their potential danger. See Sabine Towing & Transportation Co. v. St. Joe Paper Co., 297 F. Supp. 748, 752 (N.D. Fla. 1958). The accident occurred because the Moran pilot misjudged the danger from the leaves. Such miscalculations by a pilot who is, or under the circumstances ought to be aware of the danger, constitutes negligence. Pennsylvania Railroad Co. v. The S.S. Beatrice, 161 F.Supp. 136, 145 (S.D.N.Y. 1958). And see McLain Line v. The Archers Hope, 109 F. Supp. 128, 136 (E.D.N.Y. 1952). The Moran pilot thus failed to fulfill his duty of meeting the reasonably foreseeable danger implicit in the situation with the degree of care and skill that a prudent navigator would exercise under the circumstances. South, Inc. v. Moran Towing & Transportation Co., 360 F.2d 1002, 1006 (2d Cir. 1966).

The collision of the chock with the girder closely approximates the facts in *In re Great Lakes Towing Company*, 348 F. Supp. 549 (N.D. Ill. 1972) in which a ship, found to have been maneuvered negligently, collided with a bridge that was elevated to an angle of 75 degrees instead of 82 degrees as specified in its plans. The court there held:

"There can be little doubt, therefore that the Buko Maru was principally responsible for this collision. The evidence fails to establish that the railroad was more than a minor or passive contributor. This is not a case where the negligence of the bridge owner so clearly contributed that it should share the damages

equally with a negligent shipowenr, as in Atlee v. Northwestern Union Packet Co., 88 U.S. 389, 21 Wall. 389, 22 L.Ed. 619 (1875). If the bridge owner had the burden of proving that its departure from the War Department permit could not have contributed to the collision, as some collision cases apparently hold (cf. Circle Line Sightseeing Yachts v. City of New York, 283 F.2d 811 (2d Cir. 1960); The Pennsylvania v. Troop et al., 86 U.S. 125, 19 Wall. 125, 22 L.Ed. 148 (1874)), this burden has not and cannot be sustained under the circumstances of this particular collision. If on the other hand, the shipowner had the burden of proving that the condition of the bridge did in fact contribute to the collision, this burden has not been sustained either. P. Dougherty Co. v. United States, 207 F.2d 626 (3rd Cir. 1953). ert. den. 347 U.S. 912, 74 S. Ct. 476, 98 L.Ed. 1068 (1954). This apparent inconsistency should be resolved realistically and equitably by limiting the rule of The Pennsylvania (supra) to moving ships which were actively or primarily negligent. Certainly the Pennsylvania and the Atlee courts were not deciding a controversy similar to the one at bar. Since the evidence fails to establish causation on the part of the bridge, it seems fair that the negligent shipowner should bear the damages. The Umbria, 166 U.S. 404, 405, 17 S. Ct. 610, 41 L.Ed. 1053 (1897)." 348 F.Supp. at 554.

In view of Calain's prior knowledge of the elevation of the leaves, the slant of the flotilla in the dr. v, the failure to post a proper lookout, and to give orders to avert the

danger, it is just to follow the rule of In re Great Lakes Towing Company and to hold the Moran liable for the damage to the bridge and the barge.

In conclusion, damages resulting from the first collision of the barge and the fender system are to be apportioned between Moran and the State. Moran is solely liable for damage caused to the barge and the bridge by the second collision of the chock and the girder. The Devon is not liable either to Moran or the State. The issue of limitation of liability is reserved until the actual amount of damages is determined.

This Memorandum constitutes the court's findings of fact and conclusions of law.

Dated: New York, New York September 28, 1976.

MORRIS E. LASKER U.S.D.J.

<sup>&</sup>lt;sup>5</sup> The State of Connecticut waived its sovereign immunity when it filed suit for the damage to the bridge. See e.g., *The Wila*, 266 U.S. 328 (1924); *Burgess* v. *M.V. Tamano*, 382 F. Supp. 351, 355 (D. Md. 1974).

### Interlocutory Decree

## UNITED STATES DISTRICT COURT

Southern District of New York

72 Civ. 4633

In the Matter

--of---

The Complaint of Tug Helen B. Moran, Inc., as owner and Moran Towing & Transportation Co., Inc., as chartered owner of the tug Diana L. Moran, for exoneration from or Limitation of Liability.

In the Matter

-of-

The Complaint of Tug Devon, Inc., Plaintiff, as owner of the tug Devon, for exoneration from or Limitation of Liability.

This cause having duly come on for trial, and the issues raised by the pleadings having been duly tried before this Court, and having been argued and submitted by the attorneys for the respective parties, and due deliberation having been had thereon, and the Court having rendered its Memorandum decision constituting the Court's Findings of Fact and Conclusions of Law, holding Moran solely at fault and liable for the damages sustained to the barge and to the State of Connecticut from the collision between

## Interlocutory Decree

the barge Becraft and the raised northeast bascular leaf and holding the State of Connecticut and Moran equally at fault for the collision between the barge Becraft and the fender system of the Tomlinson Bridge with the damages resulting therefrom, the latter allision to be apportioned equally between Moran and the State of Connecticut, and exonerating the tug Devon from all fault for the damages sustained to either party;

Now, on motion of Burlingham Underwood & Lord attorneys for Tug Helen B. Moran, Inc. and Moran Towing & Transportation Co., it is

Ordered, adjudged and decreed that the claimant, State of Connecticut, recover herein the damages which it sustained arising out of the collision of the barge Becraft against the raised northeast leaf of the Tomlinson Bridge, with interest and costs, of and from Moran Towing & Transportation Co., Inc., as chartered owner of the tug Diana L. Moran, her engines, etc., and from its stipulators for costs and value, and it is further

ORDERED, ADJUDGED AND DECREED that the damages sustained as the result of the collision of Becraft against the bridge fender system be appointed equally between the State of Connecticut and Moran Towing & Transportation Co., Inc., and it is further

Ordered, adjudged and decreed that the claims asserted against Tug Helen B. Moran, Inc. be and hereby are dismissed and it is further

## Interlocutory Decree

ORDERED, ADJUDGED AND DECREED that the said Tug Devon, Inc. be and is hereby forever exempted and discharged from all loss, damage, destruction or injury arising from or growing out of said collisions, and it is further

Ordered, adjudged and decreed that the claims asserted against Tug Devon, Inc. be and hereby are dismissed with prejudice, and with costs in favor of Tug Devon, Inc., and it is further

Ordered, adjudged and decreed that the second case captioned above, in the matter of the Complaint of Tug Devon, Inc., 72 Civ. 4929 (M.E.L.) be and is hereby severed and after being severed is hereby discontinued, and it is further

Ordered, adjudged and decreed that the issue of limitation of liability in the first case captioned above in the matter of the Complaint of Tug Helen B. Moran, Inc. as owner and Moran Towing & Transportation Co., Inc. as chartered owner of the Tug Diana L. Moran, is reserved until the actual amount of damages is determined.

Dated: New York, New York November 8, 1976

/s/ Morris E. Lasker U.S.D.J.

JUDGMENT ENTERED — 11/30/76 /s/ RAYMOND F. BURGHARDT Clerk.

# Moran's Notice of Appeal

# UNITED STATES DISTRICT COURT

SOUTHERN DISTRICT OF NEW YORK

Filed 12-7-76

72 Civ. 4633

In the Matter

-of-

The Complaint of Tug Helen B. Moran Inc., as owner and Moran Towing & Transportation Co., Inc., as chartered owner of the tug Diana L. Moran, for exoneration from or Limitation of Liability.

PLEASE TAKE NOTICE that Moran Towing & Transportation Co., Inc., one of the plaintiffs above, hereby appeals to the United States Court of Appeals for the Second Circuit from so much of the judgment of the United States District Court for the Southern District of New York, entered herein on November 30, 1976, as exonerated the State of Connecticut from liability for the collision of barge Becraft against the raised northeast leaf of the Tomlinson Bridge and the damages consequent therefrom.

Moran's Notice of Appeal

Dated: New York, New York December 7, 1976

Yours etc.,

Burlingham Underwood & Lord Attorneys for Plaintiff Moran Towing & Transportation Co., Inc.

By /s/ ROBERT B. POHL

A Member of the Firm

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CLERK OF THE COURT